Finance Committee Agenda
Jefferson County
Jefferson County Courthouse, Room C1021
311 S. Center Ave.
Jefferson, WI 53549

Date: Tuesday, September 2, 2025
Time: 8:30 a.m.
Committee members: Jones, Richard (Chair); Zarling, Karl; Jaeckel, George (Vice-Chair); Christensen, Walt; Drayna, David

1. Call to order
2. Roll call (establish a quorum)
3. Certification of compliance with the Open Meetings Law
4. Approval of the agenda
5. Approval of minutes for Finance Committee for August 5, 2025
6. Communications
7. Public Comment (Members of the public who wish to address the Committee on specific agenda items must register their request at this time)
8. Discussion and possible action on presentation of Government Finance Officers Association Reserve Study
9. Discussion and possible action on allocating strategic plan funding for management of flood mitigation properties and amending the 2025 budget
10. Department 2026 Budget Hearing
    a. Human Services
11. Discussion and possible action on use of excess fund balance from closing of City of Watertown TID #4
12. Discussion and possible action on 2026 capital budget and financing plan
13. Discussion and possible action on 2026 budget
14. Discussion and possible action on Jefferson County's participation in a financing agreement with Aztalan Bio (If appropriate and necessary for the public interest, the Committee may convene in closed session pursuant to Wis. Stat. § 19.85(1)(e) to discuss negotiation strategy for parameters of a possible loan agreement with Aztalan Bio. Following any closed session, the Committee will reconvene in open session)
15. Discussion and possible action on determining the disposition of foreclosed properties, setting minimum bids for the sale of foreclosed properties, and considering offers to purchase on foreclosed properties
16. Discussion and possible action on 2025 projections of budget vs. actual revenues and expenditures
17. Review of the financial statements and department update for July 2025-Finance Department
18. Review of the financial statements and department update for July 2025-Treasurer's Office
19. Review of the financial statements and department update for July 2025-Child Support
20. Update on contingency fund balance
21. Discussion of funding for projects related to the new highway facilities and sale of old highway facilities
22. Set future meeting schedule, next meeting date, and possible agenda items
23. Review of invoices
24. Adjourn Finance Committee

Next scheduled meetings:
Monday, September 15, 2025 (Budget hearings)
Tuesday, September 16, 2025 (Budget hearings)
Wednesday, September 17, 2025 (Budget hearings)
Thursday, September 18, 2025 (Budget hearings)
Tuesday, October 7, 2025 (Regular meeting)

Join the meeting now
Meeting ID: 270 161 347 776 3
Passcode: WK3zS9Gf

A Quorum of any Jefferson County Committee, Board, Commission or other body, including the Jefferson County Board of Supervisors, may be present at this meeting.

Individuals requiring special accommodations for attendance at the meeting should contact the County Administrator 24 hours prior to the meeting at 920-674-7101 so appropriate arrangements can be made.

Jefferson County
Finance Committee Minutes
August 5, 2025

Committee members:	Jones, Richard (Chair)	Zarling, Karl
	Christensen, Walt	Drayna, David
	Jaeckel, George (Vice Chair)	

1. Call to order – Finance Committee Chair Richard Jones called the meeting to order at 8:30 a.m.

2. Roll call (establish a quorum) – Finance Committee members present were Richard Jones. George Jaeckel, Walt Christensen, David Drayna, and Karl Zarling. Other board members in attendance were Phil Ristow. Staff in attendance included County Administrator Michael Luckey, Corporation Counsel Danielle Thompson, Finance Director Marc DeVries; Assistant Finance Director, Tammy Worzalla; Budget Analyst, Morgan Toutant; Human Resources Coordinator, Jessica Tucker; Facilities Director, John Fox; Planning and Zoning Director, Matt Zangl; Human Services Director; Brent Ruehlow; Fair Park Director; Rebecca Roberts; Economic Development Director, Deb Reinbold; Financial Partnership Manager, Emily Clavette; Court Commissioner, Jennifer Weber; and Paralegal, Sarana Stolar. Members of the public present were Matt Slowinski of DANA Investment Managers, Mark Turley, Mark Palmer and Eric Sievers of Aztalan Bio, and Beth Gehred.

3. Certification of compliance with the Open Meetings Law – County Administrator Luckey certified compliance with the Open Meetings Law.

4. Approval of the agenda – Agenda was approved as presented.

5. Approval of minutes for Finance Committee for July 7, 2025 - Motion by Jaeckel/Zarling to approve the minutes from the Finance Committee meeting held on July 7, 2025. The motion passed 5-0.

6. Communications – None.

7. Public comment – Sarana Stolar spoke in opposition of item #9 on the agenda.

8. Discussion and possible action on presentation on County's investments by DANA Investment Managers – Matt Slowinski of DANA Investment Managers gave a presentation on the status of the County's investments and also presented a range of expected investment returns for 2026. Projected income from investments at DANA during 2026 is between $1.5 and $1.7 million. There was no action taken.

9. Discussion and possible action on accepting a grant from It Gets Better for $5,000 in the Human Services Department and amending the 2025 budget – Human Services Director Ruehlow explained that the Department was approached by a Safe Space youth group to be the fiscal agent for a grant from the Iola Foundation for LGBTQ+ youth awareness, resources and empowerment. Discussion ensued regarding whether Jefferson County was the proper entity to be named fiscal agent for this grant, as opposed to a local non-profit agency. Motion by Jones/Christensen to

approve the resolution and forward to the County Board of Supervisors. The motion passed 3-2 with Jaeckel and Dranya dissenting.

10. Discussion and possible action on awarding bid for Fire Alarm System at the Fair Park – Facilities Director Fox explained that the County received one bid from Current Electric for $39,000 and is recommending a 15% contingency for a total budget of $44,850. Motion by Jaeckel/Zarling to approve the resolution and forward to the County Board of Supervisors. The motion passed 5-0.

11. Discussion and possible action on upgrading County server environment to Windows 2025 and amending the 2025 budget – Planning and Zoning Director Zangl explained that a recently procured upgrade to the GIS software requires a corresponding upgrade to the server software. This purchase was originally intended for 2026 and would normally be paid for by all county departments through MIS. However in order to expedite the purchase, Matt's department has partnered with Human Services, MIS, Highway and Administration/Finance to identify funding to accomplish this upgrade in 2025. Motion by Jaeckel/Zarling to approve the resolution and forward to the County Board of Supervisors. The motion passed 5-0.

12. Discussion and possible action on claims against Jefferson County – Corporation Counsel Thompson explained that Optum Rx has filed a claim against Jefferson County related to their request for Jefferson County to remove them as a defendant in a pending claim against Optum Rx for the damages caused by the opioid crisis. Thompson recommends denying the claim from Optum Rx. Motion by Christensen/Zarling to deny the claim from Optum Rx and forward the resolution to the County Board of Supervisors. The motion passed 5-0.

13. Discussion and possible action on servicing the Live Local Development Fund loans and amending the 2025 budget – Finance Director DeVries explained that the accounting and loan servicing for Live Local Development Fund needs a home and originally that home was ThriveED, however as this concept was developed further it became apparent that Jefferson County was better equipped to handle these duties. If the County were to assume the accounting for this program, a budget amendment for the first loan originating in 2025 is needed. Motion by Zarling/Drayna to approve the resolution and forward to the County Board of Supervisors. The motion passed 5-0.

14. Discussion and possible action on Jefferson County's participation in a financing agreement with Aztalan Bio – County Administrator Luckey explained that Aztalan Bio, who had recently purchased and upgraded the Valero plant north of the City of Jefferson, seeks assistance in the form of a loan of $18 million from Jefferson County via the State of Wisconsin's Board of Commissioners of Public Lands (BCPL) program. Under Aztalan Bio's proposal, Jefferson County would secure the loan from BCPL and pass the funding through to Aztalan Bio. Discussion ensued regarding the risk of the loan and possible security interests and financial incentives that the County could seek in return for the loan. County Finance Director DeVries believes that this loan is too risky for public financing and is more properly suited for private investors. Motion by Christensen/Zarling to entertain the request from Aztalan Bio by engaging outside counsel to conduct due diligence on the proposed financing agreement. The motion passed 5-0.

15. Discussion and possible action on 2026 budget – DeVries updated the Committee on the status of the 2026 budget. No action was taken.

16. Discussion and possible action on determining the disposition of foreclosed properties, setting minimum bids for the sale of foreclosed properties, and considering offers to purchase on foreclosed properties – Corporation Counsel Thompson and Paralegal Stolar updated the Committee on the status of tax delinquent collections. No action was taken.

17. Consider a motion to convene in closed session for the following:

a. **To confer with legal counsel concerning the strategy to be adopted by Jefferson County with respect to litigation in which it is or is likely to be pursuant to Wis. Stat. §19.85(1)(g). The purpose of closed session will be discussion and possible action on a settlement demand regarding an alleged employment claim.**
b. **To deliberate or negotiate the purchase of public properties or conducting other specified public business, whenever competitive or bargaining reasons require a closed session pursuant to Wis. Stat. §19.85(1)(e). The purpose of closed session will be discussion and possible action regarding the sale of County-owned farmland.**

Motion by Jones/Jaeckel to convene into closed session. Roll call vote, motion passed 5-0.

18. Reconvene in open session – Motion by Jones/Jaeckel to reconvene into open session. The motion passed 5-0.

19. Discussion and possible action on 2025 projections of budget vs. actual revenues and expenditures – No action was taken.

20. Review of the financial statements and department update for June 2025-Finance Department – No action taken.

21. Review of the financial statements and department update for June 2025-Treasurer's Office - No action taken.

22. Review of the financial statements and department update for June 2025-Child Support - No action taken.

23. Update on contingency fund balance – DeVries reported the current balances of 2025 contingency funds before action taken at this meeting are $500,000 for general contingency, $532,250 for Other Contingency and $300,000 for vested benefits. No action was taken.

24. Discussion of funding for projects related to the new Highway facilities and sale of old Highway facilities - No action was taken.

25. Set future meeting schedule, next meeting date, and possible agenda items - The next scheduled meeting is set for September 2, 2025, at 8:30 a.m. Potential agenda items include discussion on 2026 budget, and potential capital and debt structures.

26. Review of invoices - Motion by Jaeckel/Drayna to approve invoices totaling $4,599,932.59. The motion passed 5-0.

27. Adjourn - Motion by Jaeckel/Drayna to adjourn at 11:22 a.m. The motion passed 5-0.

Respectfully submitted,

Marc DeVries, Finance Director
Jefferson County

JEFFERSON COUNTY
WISCONSIN
Explore. Thrive. Belong.

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Marc A. DeVries, CPA
Finance Director

Morgan Toutant
Jayne Hintzmann
Donna Miller
Tamara L. Worzalla, CPA

MEMORANDUM

To: Finance Committee
From: Marc DeVries, Finance Director
Date: August 27, 2025
RE: Key takeaways from GFOA Reserve Study

On January 14, 2025 the County Board authorized the Finance Department to engage the Government Finance Officers Association (GFOA) to perform a risk-based analysis on Jefferson County's reserves (fund balance). The report has concluded that current fund balance levels are adequate to respond to most risks with a 90% confidence level. As of now, GFOA recommends maintaining a balance of between $14.0 and $15.3 million as a reserve for potential risks. Some key takeaways from the study are as follows:

- The County should consider amending its Fund Balance Policy to adapt to the risk-based model that GFOA has created for us
- The County should modify its Revenue Policy in accordance with the suggestions made in the Study
- The County should consider other practices that are recommended in Section 7 of the Study
- The County should not limit its understanding of Fund Balance to only risk reserves. Here are some other reasons why the County would hold fund balance in excess of risk reserves:
    - Savings account/budget stabilization - investment income earned on reserves potentially offsets additional tax levy
    - Capital planning – alternate to debt issuance which also offsets tax levy
    - Additional risk reserve and/or planning for uninsured/underinsured risks (such as cyber)
    - Investment in the community/strategic initiatives (Live Local Development Fund/Revolving Loan Fund)
- The County should carefully consider its use of unassigned fund balance in excess of the current recommended risk reserve in accordance with its understanding as described above:
    - Reinvestment in programs that continue to generate ongoing financial returns should be top priority
    - No amount of the excess should be used towards ongoing operational expenses or programs
    - Any use of fund balance should consider potential effects of lost income associated with its use and the effect on future budgets

Capital Budget - 2026

Department	ORG	Account Number	Project	Description	Requested Amount	Administrator Budget	Related Funding	Budget Carryover	Bonded Debt	Use of Fund Balance	Levy Request	Class
Central Services	11201			Security shatter resistant film - Sheriff's offices	52,468	52,468	-	-	52,468	-	-	GG
Central Services	11201			Exterior camera replacement for Courthouse	54,500	54,500	-	-	54,500	-	-	GG
Central Services	11201			Crack fill/seal coat pavement/line marking Courthouse lot	20,481	20,481	-	-	20,481	-	-	GG
Central Services	11201			Courthouse lot curb and gutter repairs	39,000	39,000			39,000			GG
Central Services	11201			Powerhouse clean power system - Courthouse	29,750	29,750	-	-	29,750	-	-	GG
Central Services	11201			Pave northeast lot - Courthouse	32,870	32,870	-	-	32,870	-	-	GG
Central Services	11201			Ladder/access platform for mechanicals maintanence - SD	100,000	100,000	-	-	100,000	-	-	GG
Central Services	11201			Electrical safety inspections and infrared scanning - Courthouse	53,600	53,600			53,600			GG
Central Services	11201			Security cameras at Human Services complex	25,000	25,000	-	-	25,000	-	-	HS
Central Services	11201			UPS replacement - Workforce	12,000	12,000	-	-	12,000	-	-	HS
Central Services	11201			New controls software to Building Automation System - Highway	30,000	30,000	-	-	30,000	-	-	HS
Central Services	11201			Replace interior lighting for all Fair Park buildings	87,831	87,831	87,831	-	-	-	-	HS
Central Services	11201			Water heater - Milking parlor - Fair Park	7,500	7,500	-	-	7,500	-	-	CR
Central Services	11201			Pavement seal coat and line mark - Fair Park	50,000	50,000	-	-	50,000	-	-	CR
Central Services	11201			Stormwater engineering and site improvements - Fair Park	125,000	125,000	-	-	125,000	-	-	CR
Central Services	11201			Replace doors to restroom 1	8,795	8,795	-	-	8,795	-	-	CR
				Central Services Total:	728,795	728,795	87,831	-	640,964	-	-	
County Clerk	11701			DS200 voting machine replacement	292,200	292,200	146,100	-	146,100	-	-	GG
				Clerk Total:	292,200	292,200	146,100	-	146,100	-	-	
Land & Water Conservation	12407	594816		Agricultural Conservation Easement	500,000	500,000	247,500	252,500	-	-	-	CD
				Land & Water Conservation Total:	500,000	500,000	247,500	252,500	-	-	-	
Land Information	12503	594819		NG 911 Administrative tools	20,000	20,000	20,000	-	-	-	-	GG
Land Information	12503	584819		GIS Custom programming	20,000	20,000	20,000	-	-	-	-	GG
				Land Information Total:	40,000	40,000	40,000	-	-	-	-	
Parks	12801			Bike and Pedestrian Plan update	50,000	50,000	-	-	50,000	-	-	CR
Parks	12801			Lower Rock Lake Shelter Refurbish	15,000	15,000	-	-	15,000	-	-	CR
Parks	12801			BHI Shoreline Restoration	63,000	63,000	31,500	-	31,500	-	-	CR
Parks	12801			Park Shop Garage Door	15,000	15,000	-	-	15,000	-	-	CR
Parks	12801			Carlin Weld playground update	85,000	85,000	-	-	85,000	-	-	CR
Parks	12801			Carnes Park Asphalt Maintenance	20,000	20,000	-	-	20,000	-	-	CR
Parks	12801			Korth Park Connector Trail	160,000	160,000	143,003	16,997	-	-	-	CR
Parks	12801			Garman Restoration	100,000	100,000	100,000	-	-	-	-	CR
Parks	12801			Dump body F450 with plow	125,000	125,000	35,000	-	90,000	-	-	CR
Parks	12801			Zero turn mower	23,000	23,000	3,500	-	19,500	-	-	CR
Parks	12801			Tractor flail mower	50,000	50,000	-	-	50,000	-	-	CR
Parks	12801			HD Trailer	11,000	11,000	4,500	-	6,500	-	-	CR
				Parks Total:	717,000	717,000	317,503	16,997	382,500	-	-	
Sheriff	13101			Six (6) Ford Police Interceptors	675,335	675,335	38,000	-	637,335	-	-	PS
Sheriff	13101			Two (2) Ford Police Intercetors - Detectives	115,560	115,560	12,000	-	103,560	-	-	PS
Sheriff	13101			Ford F-350 Pickup Truck	65,000	65,000	15,000	-	50,000	-	-	PS
Sheriff	13101			K-9 replacement	16,000	16,000	16,000	-	-	-	-	PS
Sheriff	13103	594818		CAD interface with Watertown	66,600	66,600	-	-	66,600	-	-	PS
Sheriff	13103			Dual power supply for Cisco Router	42,000	42,000	-	-	42,000	-	-	PS
Sheriff	13106			30 gallon tilt skillet	24,000	24,000	-	-	24,000	-	-	PS
				Sheriff Total:	1,004,495	1,004,495	81,000	-	923,495	-	-	
				General Fund totals	**3,282,490**	**3,282,490**	**919,934**	**269,497**	**2,093,059**	**-**	**-**	
Human Services	63033011	594809	65038	Sober living facility	100,000	100,000	100,000	-	-	-	-	HS
				Human Services Total:	100,000	100,000	100,000	-	-	-	-	

Capital Budget - 2026

Department	ORG	Account Number	Project	Description	Requested Amount	Administrator Budget	Related Funding	Budget Carryover	Bonded Debt	Use of Fund Balance	Levy Request	Class
Highway-Equipment				Haul trucks/Plow equipment	2,000,000	2,000,000	2,000,000	-	-	-	-	PW
Highway-Equipment				Specialty trucks	300,000	300,000	300,000	-	-	-	-	PW
Highway-Equipment				Small trucks/pickups/SUVs	300,000	300,000	300,000	-	-	-	-	PW
Highway-Equipment				Support equipment	100,000	100,000	100,000	-	-	-	-	PW
				Highway Equipment Total:	2,700,000	2,700,000	2,700,000	-	-	-	-	
Highway-Projects	53312			CTH D (US 18-CTH E)	3,300,000	3,300,000	-	-	-	-	3,300,000	PW
Highway-Projects	53312			CTH P (US 18 - CTH B)	1,600,000	1,600,000	-	-	-	-	1,600,000	PW
				Highway Project Total:	4,900,000	4,900,000	-	-	-	-	4,900,000	
MIS	77001	594810		VM Server	64,000	64,000	-	-	-	-	64,000	GG
MIS	77001	594810		Replace County Board tablets	20,000	20,000	-	-	-	-	20,000	GG
MIS	77001	594810		Workforce/Highway Switches	175,000	175,000	-	-	-	-	175,000	GG
MIS	77001	594810		Fortinet EMS	49,000	49,000	-	-	-	-	49,000	GG
MIS	77001	594810		Central Duplicating copier	16,000	16,000	-	-	-	-	16,000	GG
				MIS Total:	324,000	324,000	-	-	-	-	324,000	
Fleet	71001383	594811		Fleet Replacement Vehicles	300,000	300,000	-	-	-	300,000	-	GG
				Fleet Total:	300,000	300,000	-	-	-	300,000	-	
				Grand Totals	**11,606,490**	**11,606,490**	**3,719,934**	**269,497**	**2,093,059**	**300,000**	**5,224,000**	
				Higway Equipment	**2,700,000**	**2,700,000**	**2,700,000**	**-**	**-**	**-**	**-**	
				Highway Project	**4,900,000**	**4,900,000**	**-**	**-**	**-**	**-**	**4,900,000**	
				General (Human, MIS, General Gov, Capital Projects, Fleet)	**4,006,490**	**4,006,490**	**1,019,934**	**269,497**	**2,093,059**	**300,000**	**324,000**	
		CD		Conservation and Development	500,000	500,000	247,500	252,500	-	-	-	
		CR		Culture/Recreation/Education	717,000	717,000	317,503	16,997	382,500	-	-	
		GG		General Government	1,684,995	1,684,995	273,931	-	787,064	300,000	324,000	
		HH		Health and Human Services	100,000	100,000	100,000	-	-	-	-	
		PS		Public Safety	1,004,495	1,004,495	81,000	-	923,495	-	-	
		PW		Public Works	7,600,000	7,600,000	2,700,000	-	-	-	4,900,000	
				Grand Totals	**11,606,490**	**11,606,490**	**3,719,934**	**269,497**	**2,093,059**	**300,000**	**5,224,000**	
					-	-	-	-	-	-	-	

JEFFERSON COUNTY
Revenue collected as of July 31

DEPT NAME	2025 REVISED	2025 ACTUALS	%COLLECTED	2024 REVISED	2024 ACTUALS	%COLLECTED	2023 REVISED	2023 ACTUALS	%COLLECTED
Administration Total	$ (1,017,274.00)	$ (502,082.15)	49%	$ (1,263,088.00)	$ (394,308.72)	31%	$ (3,253,177.00)	$ (354,131.08)	11%
Capital Projects and Debt Total	(3,917,707.00)	(2,352,484.69)	60%	(4,061,985.00)	(5,537,449.28)	136%	(12,384,243.00)	(3,384,069.20)	27%
Central Services Total	(1,085,554.00)	(620,352.58)	57%	(1,069,211.00)	(613,660.56)	57%	(985,653.00)	(573,847.35)	58%
Child Support Total	(1,279,923.00)	(683,202.70)	53%	(1,310,868.00)	(601,347.54)	46%	(1,235,122.00)	(682,243.48)	55%
Clerk of Courts Total	(1,877,067.00)	(996,729.88)	53%	(1,736,355.00)	(902,195.87)	52%	(1,743,803.00)	(939,916.63)	54%
Corporation Counsel Total	(501,862.00)	(292,832.67)	58%	(500,689.00)	(292,068.49)	58%	(488,185.00)	(292,336.84)	60%
County Board Total	(518,876.00)	(302,677.55)	58%	(513,039.00)	(299,373.92)	58%	(485,639.00)	(283,366.58)	58%
County Clerk Total	(398,030.00)	(268,986.11)	68%	(438,109.00)	(277,457.51)	63%	(414,523.00)	(266,627.59)	64%
Court Support Services Total	(1,448,519.00)	(778,092.24)	54%	(1,588,900.00)	(825,992.49)	52%	(1,529,196.00)	(715,762.12)	47%
District Attorney Total	(903,820.00)	(509,828.56)	56%	(1,030,146.00)	(530,271.39)	51%	(1,034,908.00)	(536,421.03)	52%
Economic Development Total	(505,062.00)	(341,351.61)	68%	(574,635.00)	(304,432.00)	53%	(487,082.00)	(357,653.50)	73%
Emergency Management Total	(253,375.00)	(154,672.35)	61%	(272,895.00)	(316,822.84)	116%	(256,391.00)	(98,663.27)	38%
Fair Park Total	(1,885,497.00)	(965,671.06)	51%	(1,940,507.00)	(781,267.33)	40%	(2,008,699.00)	(879,082.87)	44%
Finance Department Total	(1,189,562.00)	(695,818.12)	58%	(1,178,737.00)	(642,243.72)	54%	(1,160,790.00)	(681,831.42)	59%
General Revenues & Expenditure Total	(646,999.00)	2,273,603.72	-351%	(49,999.00)	2,341,559.48	-4683%	636,379.00	2,390,620.73	376%
Health Department Total	(1,963,294.00)	(888,290.20)	45%	(2,023,893.00)	(880,998.40)	44%	(2,041,380.00)	(916,512.94)	45%
Highway Department Total	(13,304,276.00)	(7,692,118.81)	58%	(12,872,176.00)	(7,016,170.55)	55%	(13,691,556.00)	(7,635,939.51)	56%
Human Resources Total	(821,520.00)	(480,720.84)	59%	(753,389.00)	(368,918.08)	49%	(731,756.00)	(366,676.57)	50%
Human Services Department Total	(37,973,448.00)	(16,009,972.54)	42%	(40,467,894.00)	(18,070,753.47)	45%	(36,683,238.00)	(16,142,851.99)	44%
Internal Service Funds Total	(2,890,970.00)	(1,493,087.82)	52%	(2,591,004.00)	(1,389,037.90)	54%	(2,433,439.00)	(1,263,215.65)	52%
Land & Water Conservation Total	(1,025,070.00)	(396,860.89)	39%	(1,019,812.00)	(338,430.25)	33%	(1,111,126.00)	(352,442.09)	32%
Land Information Total	(785,644.00)	(434,848.47)	55%	(728,594.00)	(416,626.33)	57%	(609,521.00)	(387,121.15)	64%
Library Total	(1,298,317.00)	(757,351.42)	58%	(1,194,080.00)	(696,546.62)	58%	(1,179,470.00)	(688,024.19)	58%
Medical Examiner Total	(404,799.00)	(210,786.58)	52%	(397,209.00)	(222,180.76)	56%	(364,329.00)	(182,518.13)	50%
Parks Department Total	(2,999,293.00)	(757,358.87)	25%	(2,335,427.00)	(1,085,289.71)	46%	(1,357,549.00)	(767,695.45)	57%
Planning And Zoning Total	(793,195.00)	(409,704.53)	52%	(755,318.00)	(390,494.78)	52%	(736,737.00)	(376,435.03)	51%
Register Of Deeds Total	(395,702.00)	(316,649.88)	80%	(390,105.00)	(187,188.29)	48%	(351,488.00)	(246,071.64)	70%
Sheriff Department Total	(19,076,379.00)	(10,819,510.92)	57%	(18,382,021.00)	(9,889,485.62)	54%	(18,275,038.00)	(9,897,235.72)	54%
Treasurer Total	(318,220.00)	(983,746.59)	309%	(324,329.00)	(1,564,504.77)	482%	(309,068.00)	(1,257,538.27)	407%
UW Extension Total	(315,592.00)	(178,252.32)	56%	(331,991.00)	(183,822.81)	55%	(294,381.00)	(165,401.96)	56%
Veterans Services Total	(261,611.00)	(161,879.79)	62%	(322,081.00)	(167,687.12)	52%	(291,193.00)	(165,808.63)	57%
GRAND TOTAL	**$ (102,056,457.00)**	**$ (49,182,319.02)**	**48%**	**$ (102,418,486.00)**	**$ (52,845,467.64)**	**52%**	**$ (107,292,301.00)**	**$ (48,466,821.15)**	**45%**

JEFFERSON COUNTY
Expenditures as of July 31

DEPT NAME	2025 REVISED	2025 ACTUALS	%SPENT	2024 REVISED	2024 ACTUALS	%SPENT	2023 REVISED	2023 ACTUALS	%SPENT
Administration Total	$ 3,473,689.00	$ 442,845.24	13%	$ 2,734,200.00	$ 827,769.69	30%	$ 3,671,136.00	$ 539,377.89	15%
Capital Projects and Debt Total	3,956,785.00	4,038,825.25	102%	23,056,715.00	13,147,402.14	57%	49,331,476.00	25,432,647.08	52%
Central Services Total	1,227,612.00	731,425.37	60%	1,291,927.00	633,338.21	49%	1,258,368.00	529,421.72	42%
Child Support Total	1,279,923.00	690,339.89	54%	1,310,868.00	708,695.82	54%	1,235,122.00	689,268.10	56%
Clerk of Courts Total	1,877,066.00	949,546.26	51%	1,737,016.00	981,598.22	57%	1,743,803.00	864,924.62	50%
Corporation Counsel Total	501,863.00	269,460.70	54%	500,690.00	250,483.63	50%	500,187.00	257,020.36	51%
County Board Total	518,876.00	320,529.34	62%	513,039.00	380,685.55	74%	560,639.00	460,972.95	82%
County Clerk Total	398,030.00	493,113.99	124%	437,611.00	556,282.45	127%	453,793.00	549,696.93	121%
Court Support Services Total	1,448,521.00	784,862.40	54%	1,601,585.00	780,115.24	49%	1,529,196.00	739,848.51	48%
District Attorney Total	903,820.00	517,617.68	57%	1,030,148.00	533,900.72	52%	1,034,908.00	563,202.05	54%
Economic Development Total	593,438.00	359,641.70	61%	615,039.00	296,683.19	48%	569,383.00	258,527.49	45%
Emergency Management Total	253,375.00	171,285.48	68%	317,496.00	192,499.91	61%	256,393.00	176,943.46	69%
Fair Park Total	2,005,495.00	957,716.33	48%	2,070,509.00	836,787.94	40%	2,035,188.00	1,117,762.56	55%
Finance Department Total	1,248,562.00	659,627.20	53%	1,193,737.00	613,376.62	51%	1,175,791.00	607,840.62	52%
General Revenues & Expenditure Total	1,332,250.00	-	0%	1,443,649.00	-	0%	3,164,889.00	-	0%
Health Department Total	2,000,597.00	1,039,231.61	52%	2,104,287.00	1,084,089.97	52%	1,976,694.00	1,034,075.36	52%
Highway Department Total	13,304,276.00	7,257,092.28	55%	12,872,177.00	6,981,933.53	54%	13,691,556.00	6,074,177.37	44%
Human Resources Total	829,400.00	410,150.32	49%	761,268.00	388,605.09	51%	881,634.00	379,406.20	43%
Human Services Department Total	38,805,157.00	21,038,869.32	54%	41,092,168.00	21,707,191.39	53%	37,639,969.00	20,263,554.77	54%
Internal Service Funds Total	2,890,970.00	1,625,920.96	56%	2,591,003.00	1,525,070.44	59%	2,433,435.00	1,499,728.46	62%
Land & Water Conservation Total	1,147,391.00	400,207.54	35%	1,076,096.00	393,879.96	37%	1,206,814.00	367,190.01	30%
Land Information Total	798,070.00	502,776.62	63%	757,359.00	350,006.05	46%	647,797.00	357,802.86	55%
Library Total	1,298,316.00	1,297,837.74	100%	1,194,080.00	1,193,162.63	100%	1,179,470.00	1,178,742.12	100%
Medical Examiner Total	404,800.00	193,799.37	48%	407,210.00	201,054.43	49%	364,329.00	182,693.60	50%
Parks Department Total	4,439,213.00	1,349,072.74	30%	3,121,260.00	904,447.49	29%	1,836,851.00	947,905.53	52%
Planning And Zoning Total	806,830.00	421,350.87	52%	755,387.00	444,808.09	59%	736,740.00	430,865.67	58%
Register Of Deeds Total	395,702.00	237,379.59	60%	390,105.00	246,758.22	63%	454,444.00	306,619.80	67%
Sheriff Department Total	20,103,459.00	10,977,615.25	55%	19,164,512.00	9,746,766.66	51%	19,017,401.00	9,982,297.21	52%
Treasurer Total	387,010.00	222,508.37	57%	324,329.00	210,075.13	65%	309,066.00	185,337.18	60%
UW Extension Total	323,593.00	163,258.74	50%	339,993.00	140,077.53	41%	302,180.00	149,445.14	49%
Veterans Services Total	261,612.00	141,842.73	54%	323,881.00	166,694.24	51%	298,003.00	170,015.34	57%
GRAND TOTAL	**$ 109,215,701.00**	**$ 58,665,750.88**	**54%**	**$ 127,129,344.00**	**$ 66,424,240.18**	**52%**	**$ 151,496,655.00**	**$ 76,297,310.96**	**50%**

July 2025 Budget Variance Report Analysis
Morgan Toutant

A. Revenue Analysis: The month of July is closed and, therefore, the County is 7/12th of the way through 2025. I anticipate seeing 58.34% collected for department revenue. My horizontal analysis will be based off how the 2025 collection percentage compares to 2023 and 2024. My vertical analysis will be based off how relative the 2025 collection percentage is to 100%. The departments that are noted below are outliers to what is expected.

1. Administration: A delay in receiving TAD Grant funding is the primary reason for the lower-than-expected percentage. Without this delay, Administration is 58% collected in July.

2. Child Support: Reminder that Child Support is grant funded and this puts billing processing in arrears which, in turn, leads to apparent under collection of revenue.

3. Clerk of Courts: Clerk of Courts is under collected in July due to low collection of circuit court costs, misc. court fees, and state aid. This activity is typical over the last three years.

4. County Clerk: Revenue collected for annual election software renewals as well as passport renewals/photos continue to be the driving factors to County Clerk's over collection. Additionally, marriage license fee revenue is contributing to the percentage in July.

5. Court Support Services: Not yet receiving court reimbursement state aid is the main contributing factor to the under collection in July. Reminder that this is received in September.

6. Economic Development: Interest collected in the Local Development Fund continues to drive the percentage for Economic Development. Without this factor, the department is 57% collected.

7. Fair Park: As a whole, Fair Park is 51% collected in July. This percentage is best analyzed by isolating the org code data:
    - **Fair Park (12101):** Fair Park is 50% collected as of July 31st. This is an 11% increase from 2023 and a 16% increase from 2024. This lower-than-expected percentage is primarily due to an under collection in sponsor revenue. Excluding this factor, Fair Park is 57% collected.
    - **Fair Week (12102):** Fair Week is 52% collected as of July 31st. This is a 7% increase from 2023 and a 1% increase from 2024. This lower-than-expected percentage is due to an under collection in sponsor revenue as well as Fair Auction fees. Excluding these two factors, Fair Week is 58% collected.

8. Health: Reminder that grants are billed in arrears and collections are usually at least a month behind.

9. Human Services: State aid and grant revenue collection for various programs offered by Human Services have not yet occurred in July and is the primary contributing factor to the overall percentage. Reminder that these are collected in arrears throughout the year.

10. Internal Service Fund: Not yet selling fleet vehicles is driving the lower-than-expected collection in the Internal Service Fund.

11. Land & Water Conservation: Not yet receiving state aid for the DATCP Staffing Grant as well as federal funding for farm preservation are the primary reasons for the under collection in July. Historically, the DATCP Staffing Grant funds have been received in September or October.

12. Land Information: The NG 911 Grant is 40% collected as of July 31st and is the primary driving factor to the overall lower-than-expected percentage for Land Information. It is expected that this will be received in full by the end of the year.

13. Medical Examiner: Low collection in cremation permit revenue continues to drive the overall collection percentage in the month of July. This is normal activity for this time of year.

14. Parks: Uncollected Interurban Bike Trail TAP Grant revenue and restricted donations continue to be the main contributing factors to the lower-than-expected percentage in July.

15. Planning and Zoning: Reminder that revenue associated with Deer Track Park charges is received by the end of the year. Excluding this factor, Planning and Zoning is 59% collected.

16. Register of Deeds: Higher-than-expected collection of transfer fees, recording/filing fees and Laredo funds continue to drive the over collection for Register of Deeds in July.

17. Treasurer: Higher-than-expected collection on interest & dividends, fair market value adjustments as well as interest on taxes are the main factors contributing to the Treasurer's office percentage in July.

18. Veteran Services: Like June, the over collection in the Veterans office is due to receiving the full amount of the CVSO Grant. Excluding this factor, Veteran Services is 59% collected.

B. Expense Analysis: Like the Revenue Analysis, below are the departments that are outliers to what is expected at this point in the year.

1. Administration: Like June, expenses that have not yet occurred for the Live Local Development Fund, Highway site remediation, and EMS planning continue to drive this low percentage. Additionally, an open position within the department and the benefits associated with it are contributing to the percentage.

2. Capital Projects and Debt: Reminder that this percentage is due to the conclusion of the courthouse project.

3. Child Support: An open position in the Child Support Department continues to drive the lower-than-expected spending into July.

4. Clerk of Courts: Like June, an open position as well as lower-than-expected spending on interpreter fees is driving this overall percentage.

5. Corporation Counsel: A previously open position within Corporation Counsel continues to drive the low overall spending percentage. This position was filled in April 2025.

6. County Board: Reminder that this higher-than-expected percentage is historically typical and due to the annual JCEDC fee allocation. Without these expenses, County Board is 51% spent. The annual payment to the Rock River Free Clinic has not taken place in July.

7. County Clerk: Reminder that the expenses for property, auto liability, and other insurance annual renewals are the primary factor to the high percentage in County Clerk. Excluding these expenses, County Clerk is overspent at 62%. Like June, this is due to election ballot printing and election equipment maintenance.

8. Court Support Services: Open positions within the department and the benefits associated with them are driving the lower-than-expected spending in July.

9. Emergency Management: Like June, professional service expenses associated with the BRIC Grant, NHMGP Grant, Hazard Mitigation Grant as well as river gauge monitoring for 2025 are the main contributing factors for Emergency Management's overspending in July.

10. Fair Park: As of July 2025, Fair Park is 48% spent. This percentage is best analyzed by isolating the org code data:
    - **Fair Park (12101):** Fair Park is 57% spent as of July 31st. Reminder that the expected percentage for this time of year is 58.34% to which Fair Park's spending falls in line.
    - **Fair Week (12102):** Fair Week is 42% spent as of July 31st. This is due to auction award checks not yet being paid to exhibitors. These payments typically occur in September.

11. Finance: Employee dental claims continue to drive the low spending in the Finance Department. Spending not yet taking place for Forecast5 software subscription is also contributing to this lower-than-expected percentage in July.

12. Health: Like in June, open positions within the Health department as well as the benefit expenses associated with them is driving the lower-than-expected percentage in July.

13. Human Resources: An open position and the benefits associated with this position continue to drive low spending for Human Resources.

14. Human Services: Various open positions within the department continue to drive the percentage in July. Like June, ongoing capital building improvement projects and the low spending on them are also contributing to this percentage.

15. Land and Water Conservation: Zero spending for the PACE Program continues to be the main contributing factor to the low spending in Land and Water Conservation. Like June, minimal spending on cost share payments for the DATCP Program and cover crop cost share expenses for various grants are also driving this percentage in July.

16. Land Information: Spending associated with GIS aerial photos as well as ESRI GIS and File Director software subscriptions are the primary contributing factors to the higher-than-expected percentage in Land Information. Excluding these factors, the department is 57% spent in July.

17. Medical Examiner: Low spending on autopsies and autopsy transport continues to drive the Medical Examiner's low spending in July.

18. Parks: Spending that has not yet taken place for the Interurban Bike Trail project as well as other budgeted capital improvement projects to the Parks building are the main contributing factors to the low percentage in July.

19. Planning and Zoning: A previously open position within the department continues to drive the lower-than-expected spending in Planning and Zoning in July.

20. UW-Extension: Like June, spending that has not yet occurred for laptop and docking station replacements, the A/V system replacement project, as well as the annual activity center rent are driving the low spending in July.

21. Veterans: Low spending on advertising, gas/diesel as well as an adjustment/refund through the payroll process are driving the slight underspending in July for the Veterans department.

FROM 2025 01 TO 2025 07

ACCOUNTS FOR: 100 General Fund	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	ACTUALS	ENCUMBRANCES	AVAILABLE BUDGET	PCT USED
12201 Finance							
12201 411100 General Property Taxes	-694,952	0	-694,952	-405,388.62		-289,563.32	58.3%
12201 412100 Sales Taxes From County	-160	0	-160	-74.64		-85.36	46.7%
12201 451004 Garnishment Fees	-100	0	-100	-30.00		-70.00	30.0%
12201 451005 Child Support Fees	-350	0	-350	-337.08		-12.92	96.3%
12201 486002 Unclaimed Funds Revenue	0	0	0	-16,536.61		16,536.61	.0%
12201 699999 Budgetary Fund Balance	0	-59,000	-59,000	.00		-59,000.00	.0%
TOTAL Finance	-695,562	-59,000	-754,562	-422,366.95		-332,194.99	%
12202 Dental Insurance Allocation							
12202 451026 Retiree Ins Premium Recovery	-20,000	0	-20,000	-11,177.62		-8,822.38	55.9%
12202 451032 Cobra Premium Recovery	-3,000	0	-3,000	-656.93		-2,343.07	21.9%
12202 451043 County Board Premiums	-1,000	0	-1,000	-301.00		-699.00	30.1%
12202 451045 Employee Premiums	-470,000	0	-470,000	-261,315.62		-208,684.38	55.6%
TOTAL Dental Insurance Allocation	-494,000	0	-494,000	-273,451.17		-220,548.83	%
TOTAL General Fund	-1,189,562	-59,000	-1,248,562	-695,818.12		-552,743.82	%
TOTAL REVENUES	-1,189,562	-59,000	-1,248,562	-695,818.12		-552,743.82	

FROM 2025 01 TO 2025 07

ACCOUNTS FOR: 100 General Fund	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	ACTUALS	ENCUMBRANCES	AVAILABLE BUDGET	PCT USED
12201 Finance							
12201 511110 Salary-Permanent Regular	262,164	0	262,164	147,140.08		115,023.82	56.1%
12201 511210 Wages-Regular	195,592	0	195,592	112,713.68		82,878.72	57.6%
12201 511220 Wages-Overtime	2,031	0	2,031	130.23		1,900.51	6.4%
12201 511330 Wages-Longevity Pay	680	0	680	.00		680.00	.0%
12201 512141 Social Security	33,026	0	33,026	18,722.29		14,303.69	56.7%
12201 512142 Retirement (Employer)	32,002	0	32,002	18,068.89		13,933.57	56.5%
12201 512144 Health Insurance	58,386	0	58,386	34,406.04		23,979.84	58.9%
12201 512145 Life Insurance	172	0	172	136.04		35.92	79.1%
12201 512151 HSA Contribution	5,300	0	5,300	.00		5,300.00	.0%
12201 512153 HRA Contribution	0	0	0	160.82		-160.82	.0%
12201 512173 Dental Insurance	4,344	0	4,344	2,585.69		1,758.31	59.5%
12201 521213 Accounting & Auditing	25,716	0	25,716	25,756.00		-40.00	100.2%
12201 521219 Other Professional Serv	3,750	59,000	62,750	40,610.00		12,140.00	80.7%
12201 521296 Computer Support	4,050	0	4,050	3,454.46		595.54	85.3%
12201 531303 Computer Equipmt & Software	26,500	0	26,500	3,130.00		23,370.00	11.8%
12201 531311 Postage & Box Rent	3,000	0	3,000	2,003.60		996.40	66.8%
12201 531312 Office Supplies	2,600	0	2,600	269.02		2,330.98	10.3%
12201 531313 Printing & Duplicating	2,000	0	2,000	108.38		1,891.62	5.4%
12201 531324 Membership Dues	1,150	0	1,150	701.16		448.84	61.0%
12201 532325 Registration	3,425	0	3,425	1,370.00		2,055.00	40.0%
12201 532332 Mileage	100	0	100	65.10		34.90	65.1%
12201 532334 Commercial Travel	1,200	0	1,200	744.93		455.07	62.1%
12201 532335 Meals	300	0	300	239.61		60.39	79.9%
12201 532336 Lodging	2,200	0	2,200	2,531.80		-331.80	115.1%
12201 532339 Other Travel & Tolls	200	0	200	237.09		-37.09	118.5%
12201 535242 Maintain Machinery & Equip	1,000	0	1,000	639.80		360.20	64.0%
12201 571004 IP Telephony Allocation	638	0	638	372.19		265.81	58.3%
12201 571005 Duplicating Allocation	105	0	105	61.25		43.75	58.3%
12201 571009 MIS PC Group Allocation	15,368	0	15,368	8,964.69		6,403.31	58.3%
12201 571010 MIS Systems Grp Alloc(ISIS)	4,271	0	4,271	2,491.44		1,779.56	58.3%
12201 591519 Other Insurance	4,292	0	4,292	2,522.03		1,769.59	58.8%
TOTAL Finance	695,562	59,000	754,562	430,336.31		314,225.63	%
12202 Dental Insurance Allocation							
12202 599982 Retiree Dental Claims	12,000	0	12,000	9,390.90		2,609.10	78.3%

FROM 2025 01 TO 2025 07

ACCOUNTS FOR: 100 General Fund	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	ACTUALS	ENCUMBRANCES	AVAILABLE BUDGET	PCT USED
12202 599984 Cobra Dental Claims	6,000	0	6,000	1,111.00		4,889.00	18.5%
12202 599986 Administrative Fees Dental	24,000	0	24,000	14,134.68		9,865.32	58.9%
12202 599989 Employee Dental Claims	450,300	0	450,300	203,981.23		246,318.77	45.3%
12202 599992 Administrative Dental Retiree	1,700	0	1,700	673.08		1,026.92	39.6%
TOTAL Dental Insurance Allocation	494,000	0	494,000	229,290.89		264,709.11	%
TOTAL General Fund	1,189,562	59,000	1,248,562	659,627.20		578,934.74	%
TOTAL EXPENSES	1,189,562	59,000	1,248,562	659,627.20		578,934.74	

FROM 2025 01 TO 2025 07

ACCOUNTS FOR: 100 General Fund	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	ACTUALS	ENCUMBRANCES	AVAILABLE BUDGET	PCT USED
13201 County Treasurer							
13201 411100 General Property Taxes	1,830,649	0	1,830,649	1,067,878.42		762,770.32	58.3%
13201 411300 DNR Pilot	-60,000	0	-60,000	-62,101.91		2,101.91	103.5%
13201 411500 Managed Forest	-3,600	0	-3,600	-4,620.41		1,020.41	128.3%
13201 418100 Interest On Taxes	-215,000	0	-215,000	-149,960.30		-65,039.70	69.7%
13201 441030 Ag Use Conversion Penalty	-32,600	0	-32,600	-26,090.46		-6,509.54	80.0%
13201 451007 Treasurers Fees	-400	0	-400	-176.00		-224.00	44.0%
13201 481001 Interest & Dividends	-1,800,269	0	-1,800,269	-1,596,847.53		-203,421.74	88.7%
13201 481004 Fair Market Value Adjustment	0	0	0	-177,672.08		177,672.08	.0%
13201 486004 Miscellaneous Revenue	0	0	0	-677.62		677.62	.0%
TOTAL County Treasurer	-281,221	0	-281,221	-950,267.89		669,047.36	%
13202 Tax Deed Expense							
13202 451030 Foreclosure Reimbursement	-34,000	0	-34,000	-6,978.47		-27,021.53	20.5%
13202 451030 13202 Foreclosure Reimburseme	0	0	0	-12,500.23		12,500.23	.0%
13202 482002 Rent Of County Property	-3,000	0	-3,000	.00		-3,000.00	.0%
13202 482002 13202 Rent Of County Property	0	0	0	-14,000.00		14,000.00	.0%
13202 699999 Budgetary Fund Balance	0	-68,789	-68,789	.00		-68,788.86	.0%
TOTAL Tax Deed Expense	-37,000	-68,789	-105,789	-33,478.70		-72,310.16	%
TOTAL General Fund	-318,221	-68,789	-387,009	-983,746.59		596,737.20	%
TOTAL REVENUES	-318,221	-68,789	-387,009	-983,746.59		596,737.20	

FROM 2025 01 TO 2025 07

ACCOUNTS FOR: 100 General Fund	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	ACTUALS	ENCUMBRANCES	AVAILABLE BUDGET	PCT USED
13201 County Treasurer							
13201 511110 Salary-Permanent Regular	92,186	0	92,186	53,642.91		38,542.69	58.2%
13201 511210 Wages-Regular	58,699	0	58,699	34,648.94		24,050.23	59.0%
13201 511220 Wages-Overtime	36	0	36	26.17		9.86	72.6%
13201 512141 Social Security	10,146	0	10,146	6,030.30		4,115.66	59.4%
13201 512142 Retirement (Employer)	10,239	0	10,239	5,975.50		4,263.29	58.4%
13201 512144 Health Insurance	31,107	0	31,107	16,581.37		14,525.67	53.3%
13201 512145 Life Insurance	21	0	21	15.32		5.26	74.4%
13201 512151 HSA Contribution	2,700	0	2,700	.00		2,700.00	.0%
13201 512153 HRA Contribution	0	0	0	150.00		-150.00	.0%
13201 512173 Dental Insurance	2,318	0	2,318	1,372.62		945.78	59.2%
13201 521232 Investment Advisor Fees	40,000	0	40,000	33,250.22		6,749.78	83.1%
13201 531311 Postage & Box Rent	7,000	0	7,000	5,860.95		1,139.05	83.7%
13201 531312 Office Supplies	2,000	0	2,000	721.10		1,278.90	36.1%
13201 531313 Printing & Duplicating	100	0	100	39.39		60.61	39.4%
13201 531314 Small Items Of Equipment	300	0	300	.00		300.00	.0%
13201 531321 Publication Of Legal Notice	3,000	0	3,000	2,937.00		63.00	97.9%
13201 531324 Membership Dues	100	0	100	86.16		13.84	86.2%
13201 531326 Advertising	500	0	500	.00		500.00	.0%
13201 532325 Registration	1,115	0	1,115	250.00		865.00	22.4%
13201 532332 Mileage	358	0	358	28.50		329.15	8.0%
13201 532335 Meals	50	0	50	.00		50.00	.0%
13201 532336 Lodging	1,800	0	1,800	470.00		1,330.00	26.1%
13201 533225 Telephone & Fax	100	0	100	.00		100.00	.0%
13201 535242 Maintain Machinery & Equip	500	0	500	225.83		274.17	45.2%
13201 571004 IP Telephony Allocation	510	0	510	297.50		212.50	58.3%
13201 571005 Duplicating Allocation	4	0	4	2.31		1.69	57.8%
13201 571009 MIS PC Group Allocation	11,530	0	11,530	6,725.81		4,804.19	58.3%
13201 571010 MIS Systems Grp Alloc(ISIS)	1,794	0	1,794	1,046.50		747.50	58.3%
13201 591519 Other Insurance	1,508	0	1,508	826.63		681.68	54.8%
13201 593256 Bank Charges	1,500	0	1,500	676.49		823.51	45.1%
TOTAL County Treasurer	281,221	0	281,221	171,887.52		109,333.01	%
13202 Tax Deed Expense							
13202 521212 Legal	30	0	30	28.75		1.25	95.8%

FROM 2025 01 TO 2025 07

ACCOUNTS FOR: 100 General Fund	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	ACTUALS	ENCUMBRANCES	AVAILABLE BUDGET	PCT USED
13202 521212 13202 Legal	0	0	0	30.00		-30.00	.0%
13202 521219 Other Professional Serv	0	0	0	240.00		-240.00	.0%
13202 521255 Paper Service	1,000	0	1,000	.00		1,000.00	.0%
13202 521273 Title Search	6,870	0	6,870	1,870.00		5,000.00	27.2%
13202 529299 Purchase Care & Services	4,000	0	4,000	.00		4,000.00	.0%
13202 531311 Postage & Box Rent	700	0	700	503.77		196.23	72.0%
13202 531313 Printing & Duplicating	400	0	400	.00		400.00	.0%
13202 531321 Publication Of Legal Notice	16,000	0	16,000	5,755.43		10,244.57	36.0%
13202 531326 Advertising	3,000	0	3,000	.00		3,000.00	.0%
13202 533222 13202 Electric	0	0	0	5,782.35		-5,782.35	.0%
13202 593742 Uncollected Taxes	5,000	0	5,000	-729.55		5,729.55	-14.6%
13202 593749 Other Losses	0	68,789	68,789	3,713.20		65,075.66	5.4%
13202 593749 13202 Other Losses	0	0	0	33,426.90		-33,426.90	.0%
TOTAL Tax Deed Expense	37,000	68,789	105,789	50,620.85		55,168.01	%
TOTAL General Fund	318,221	68,789	387,009	222,508.37		164,501.02	%
TOTAL EXPENSES	318,221	68,789	387,009	222,508.37		164,501.02	

FROM 2025 01 TO 2025 07

ACCOUNTS FOR: 100 General Fund	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	ACTUALS	ENCUMBRANCES	AVAILABLE BUDGET	PCT USED
11301 Child Support							
11301 411100 General Property Taxes	-113,751	0	-113,751	-66,354.82		-47,396.26	58.3%
11301 421001 State Aid	-184,299	0	-184,299	-184,299.59		.59	100.0%
11301 421010 M S L Incentives	-2,500	0	-2,500	-2,481.21		-18.79	99.2%
11301 421012 State Aid Cs + All Others	-1,045,828	0	-1,045,828	-475,872.68		-569,955.32	45.5%
11301 421014 State Aid Wages Allocation	133,908	0	133,908	65,595.75		68,312.25	49.0%
11301 421050 CS Performance Based Inc	-54,056	0	-54,056	.00		-54,056.00	.0%
11301 421058 State Aid - Prior Year	0	0	0	229.34		-229.34	.0%
11301 421096 State Aid Medical Support	-5,200	0	-5,200	-5,402.00		202.00	103.9%
11301 442004 Extradition Reimbursement	-800	0	-800	-1,588.39		788.39	198.5%
11301 451011 CS Prog Fee Reduce 66%	9,108	0	9,108	13,938.43		-4,830.43	153.0%
11301 451013 NIVD Activities Reduction	-2,700	0	-2,700	-1,137.95		-1,562.05	42.1%
11301 451014 CS Program Fees	-13,000	0	-13,000	-6,902.28		-6,097.72	53.1%
11301 455003 Non-IVD Service Fees	-805	0	-805	-549.60		-255.40	68.3%
11301 471205 Child Support Billed	0	0	0	-18,377.70		18,377.70	.0%
TOTAL Child Support	-1,279,923	0	-1,279,923	-683,202.70		-596,720.38	%
TOTAL General Fund	-1,279,923	0	-1,279,923	-683,202.70		-596,720.38	%
TOTAL REVENUES	-1,279,923	0	-1,279,923	-683,202.70		-596,720.38	

FROM 2025 01 TO 2025 07

ACCOUNTS FOR: 100 General Fund	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	ACTUALS	ENCUMBRANCES	AVAILABLE BUDGET	PCT USED
11301 Child Support							
11301 511110 Salary-Permanent Regular	318,699	0	318,699	152,452.95		166,246.12	47.8%
11301 511210 Wages-Regular	571,928	0	571,928	333,253.18		238,674.57	58.3%
11301 511220 Wages-Overtime	2,815	0	2,815	113.02		2,702.24	4.0%
11301 511330 Wages-Longevity Pay	1,373	0	1,373	218.74		1,153.76	15.9%
11301 512141 Social Security	65,030	0	65,030	35,357.00		29,672.97	54.4%
11301 512142 Retirement (Employer)	61,634	0	61,634	31,135.38		30,498.23	50.5%
11301 512144 Health Insurance	108,796	0	108,796	68,349.69		40,446.25	62.8%
11301 512145 Life Insurance	315	0	315	146.90		168.51	46.6%
11301 512151 HSA Contribution	10,140	0	10,140	.00		10,140.00	.0%
11301 512153 HRA Contribution	0	0	0	1,135.71		-1,135.71	.0%
11301 512173 Dental Insurance	8,467	0	8,467	4,391.15		4,076.05	51.9%
11301 521255 Paper Service	8,500	0	8,500	4,302.28		4,197.72	50.6%
11301 521256 Genetic Tests	5,700	0	5,700	2,607.50		3,092.50	45.7%
11301 521296 Computer Support	1,900	0	1,900	1,532.88		367.12	80.7%
11301 529160 Interpreter Fee	3,000	0	3,000	232.00		2,768.00	7.7%
11301 531003 Notary Public Related	180	0	180	142.99		37.01	79.4%
11301 531303 Computer Equipmt & Software	2,530	0	2,530	2,066.00		464.00	81.7%
11301 531310 Postage Special	250	0	250	258.20		-8.20	103.3%
11301 531311 Postage & Box Rent	21,000	0	21,000	13,032.92		7,967.08	62.1%
11301 531312 Office Supplies	2,500	0	2,500	1,059.86		1,440.14	42.4%
11301 531313 Printing & Duplicating	2,850	0	2,850	144.19		2,705.81	5.1%
11301 531314 Small Items Of Equipment	1,100	0	1,100	303.99		796.01	27.6%
11301 531321 Publication Of Legal Notice	1,000	0	1,000	621.50		378.50	62.2%
11301 531324 Membership Dues	2,128	0	2,128	1,208.16		919.84	56.8%
11301 531326 Advertising	400	0	400	350.00		50.00	87.5%
11301 531348 Educational Supplies	450	0	450	278.30		171.70	61.8%
11301 531351 Gas/Diesel	0	0	0	31.04		-31.04	.0%
11301 532325 Registration	3,520	0	3,520	2,170.00		1,350.00	61.6%
11301 532332 Mileage	780	0	780	91.96		688.04	11.8%
11301 532334 Commercial Travel	1,300	0	1,300	.00		1,300.00	.0%
11301 532335 Meals	800	0	800	195.34		604.66	24.4%
11301 532336 Lodging	3,798	0	3,798	315.00		3,483.00	8.3%
11301 532339 Other Travel & Tolls	210	0	210	.00		210.00	.0%
11301 532340 Contracted Extraditions	8,700	0	8,700	.00		8,700.00	.0%
11301 533225 Telephone & Fax	170	0	170	.00		170.00	.0%
11301 535242 Maintain Machinery & Equip	3,600	0	3,600	1,344.16		2,255.84	37.3%
11301 571004 IP Telephony Allocation	3,316	0	3,316	1,934.31		1,381.69	58.3%
11301 571005 Duplicating Allocation	109	0	109	63.56		45.44	58.3%

FROM 2025 01 TO 2025 07

ACCOUNTS FOR: 100 General Fund	ORIGINAL APPROP	TRANFRS/ ADJSTMTS	REVISED BUDGET	ACTUALS	ENCUMBRANCES	AVAILABLE BUDGET	PCT USED
11301 571009 MIS PC Group Allocation	32,944	0	32,944	19,217.31		13,726.69	58.3%
11301 571010 MIS Systems Grp Alloc(ISIS)	9,226	0	9,226	5,381.81		3,844.19	58.3%
11301 591519 Other Insurance	8,765	0	8,765	4,900.91		3,864.46	55.9%
TOTAL Child Support	1,279,923	0	1,279,923	690,339.89		589,583.19	%
TOTAL General Fund	1,279,923	0	1,279,923	690,339.89		589,583.19	%
TOTAL EXPENSES	1,279,923	0	1,279,923	690,339.89		589,583.19	

Jefferson County
Contingency Fund
For the Year Ended December 31, 2025

Ledger Date	Description	General (599900)	Other (599908)	Vested Benefits (599909)	Authority
1-Jan-25	Tax Levy	500,000.00	0.00	300,000.00	
11-Mar-25	Budget carryover requests	0.00	532,250.00	0.00	County Board
5-Aug-25	Fair Park fire alarm system replacement	(44,850.00)			County Board
5-Aug-25	Windows Server 2025 upgrade	(11,892.00)			County Board
Tentative	Water main break	(115,000.00)			
Tentative	Priority capital projects	(121,117.00)			
Tentative	Signage for flood mitigation properties		(9,836.90)		
	Total amount available	**207,141.00**	**522,413.10**	**300,000.00**	
	Net	207,141.00	522,413.10	300,000.00	

A Risk-Based Analysis and Stress Test of Reserve Requirements for Jefferson County, Wisconsin

DRAFT

2025

Produced by:

The Government Finance Officers Association

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Section 1 - Executive Summary

A local government's "reserves" are the portion of fund balance which serves as a hedge against risk. Jefferson County ("the County") has asked the questions: "what is the right amount of general fund reserves for us?" and "how resilient would any potential reserve target be to losses?" The Government Finance Officers Association (GFOA) has helped the County answer this question by examining the risks to which it is subject.

First, we identified the risks that posed the most clear-and-present danger to the County's general fund. The major risks we examined include (but were not limited to):[1]

- Recessions and revenue volatility
- Severe storms / Tornados
- Flooding
- Winter storms
- Retained risk on commercial insurance, such as "nuclear verdicts"[2]

Next, for each risk, we calculated the probability that the County would experience the risk over a ten-year period and, if an event were to occur, what the magnitude of the loss would be for the County's general fund. To calculate the probability and magnitude of events, we did the following:

- **Analyzed the County's own experience and the experiences of other counties.** For example, a severe storm / tornado might produce comparable losses in counties of comparable size with comparable exposure to storms / tornados.
- **Reviewed research produced by other agencies.** For instance, the Federal Emergency Management Agency (FEMA) has data on costs that natural disasters have caused.
- **Drew from the expertise of County staff.** County staff work every day on preparing the County for the risks it faces. Staff provided their expertise to help us estimate risks. For example, County staff helped us understand the nuances of natural disaster risks and revenue instability risks in the County. The County Hazard Plan was also a valuable resource.

Readers interested in how each risk was analyzed are invited to consult Sections 4 and 5 of the full report.

We modeled each risk individually and then combined each individual risk into a ten-year model of the County's reserves. The model is intended to answer the question: what amount of reserves will give the County sufficient confidence that it will be able to cover the losses from the risks GFOA has analyzed?

We combined all the information above to create a ten-year **risk model**. The County's goal for this analysis was to find an amount that can give the County sufficient confidence that its reserves will cover its risks.

The risk model is intended to answer the question: What amount of reserves will give the County sufficient confidence that it will be able to cover the losses from the risks GFOA has analyzed ***and, at the same time,*** also stay above an amount of reserves that is expected by bond rating agencies for a AAA bond rating?

[1] We used the County's Hazard Plan to help identify all of the relevant risks.

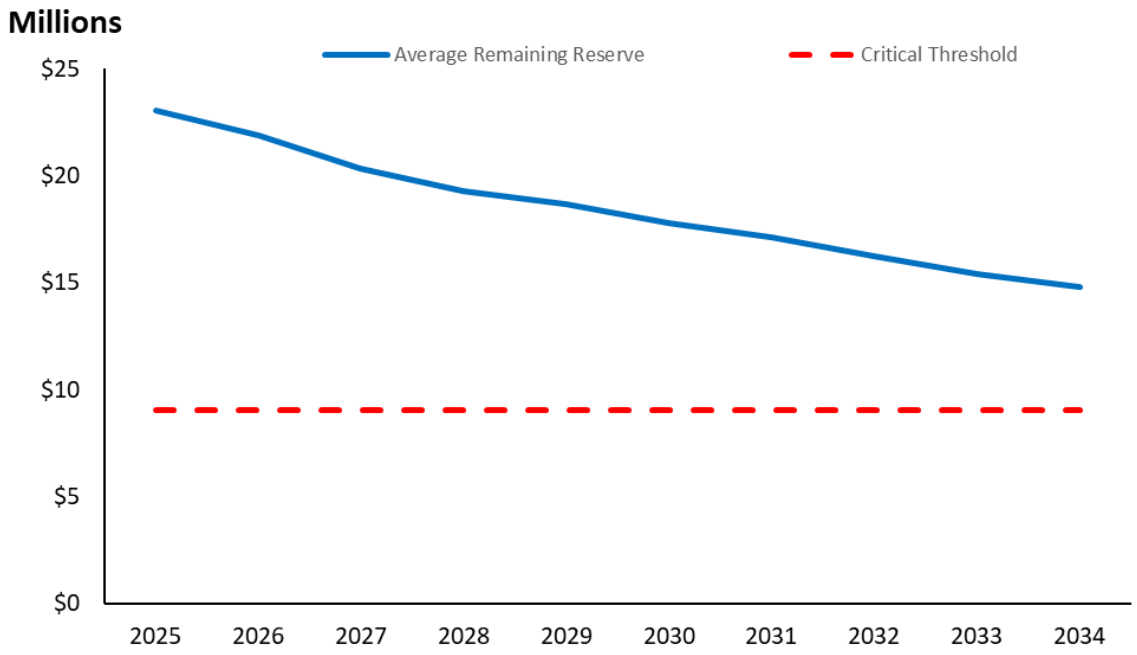
[2] A "nuclear verdict" is a high-cost judgment that costs the defendant multi-million dollars.

The main report includes details on bond rating agency expectations, but, in short, we went by guidelines published by Moody's rating agency which suggests that available fund balance equal to 35% or more of revenues is associated with a AAA bond rating. It is important to note that Moody's considers "available fund balance," while we examine "reserves." Reserves is the amount of fund balance set aside as self-insurance, while available fund balance is all fund balance that might be reasonably available to repay debt, should need arise (even the County had other plans). We accommodated this distinction in our analysis. The result was a "critical threshold" that represents the amount that the reserve should not go below to maintain a fund balance consistent with a AAA rating, which was equal to $9 million.

This critical threshold is the amount of reserves the County does not want to go below, ***while at the same time*** also having adequate confidence in handling all the risks described in this report. The model allows the user to define the critical threshold, so other thresholds can also be examined.

Exhibit 1.1 shows the average remaining reserve per year (blue line) in our simulation. It also includes a dashed red line, which is the critical threshold.

Exhibit 7.1 – Simulated Remaining Reserve Per Year (Constant Dollars)



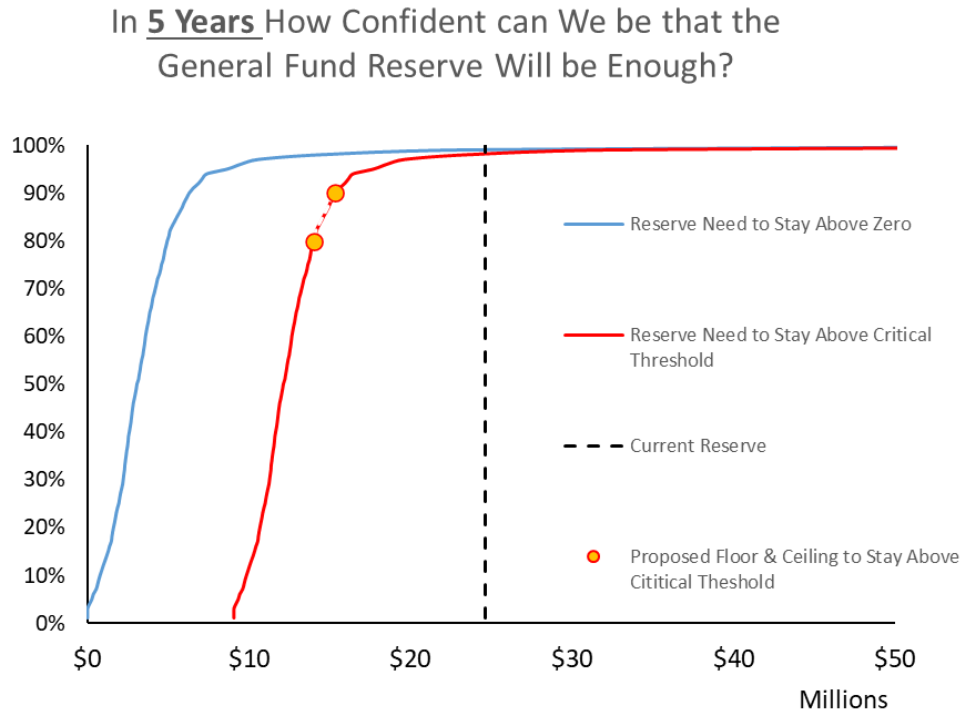
The Exhibit shows the County's reserves are simulated to drift downwards, on average, over the next ten years. However, we can see that it remains above the dotted red line over the entire period. The reason the line tends to drift downwards is two-fold:

- In consultation with County staff, we set a limit on how much of any surplus would go towards building up the reserve. If the reserve gets above 25% of revenues it is assumed to be likely (though not guaranteed) that the Board would direct the surplus to some other purpose that building up reserves.
- The County's future anticipated surpluses are modest, which means that in the case of larger losses the reserves would be built back up slowly.

Below is Exhibit 1.2. This is a cumulative probability chart. It shows the confidence available from varying levels of reserves over a ***five-year*** period. We limited ourselves to a five-year perspective for this graphic because five years because County staff considered five years to be a more realistic period over which to consider the County's reserves (and GFOA agrees that five years is perfectly reasonable). On the graph, we see that the County's existing reserve (the black dashed line) intersects the red line at a very high level of confidence - over 90%. The main take-away from this graphic is the reserves have a diminishing return at a certain point because the flatter the line gets, the less confidence an additional dollar of reserve "buys" you. This is because the further to the right you go on the graph, the more extreme the events are that must be covered by reserves. The County would not be well served by accumulating reserves past the point where the line starts to flatten out. The implication of the line going flat is that not all points on the line are equally cost effective. Any point on the line that is on a flatter part of the curve is less cost effective than a point on a steeper part of the curve.

GFOA discussed the model with County staff, and the conclusion was that the County would be well-served by the target range shown on Exhibit 7.2. This equates to about $14 to $15 million and provides about 80% to 90% confidence in managing the risks the County faces ***and*** staying above the critical threshold (AAA-standard). This amounts to about 34% to 37% of the County's general fund annual expenditures. We can see the recommended range (bound by the orange dots on the red line) is less than the current reserve (the black dotted line).

Exhibit 1.2 – Cumulative Probability Chart



GFOA recommends the County establish a policy for a floor and a ceiling amount of reserves, as is shown in the Exhibit. The ceiling is an amount of reserves this County will try not to exceed and a floor is an amount that County will try not to go below and will try to replenish the reserves if they do go below the floor. GFOA cannot recommend a single dollar amount of reserves the County should maintain, but our analysis does provide a clear general direction in the form of reserve goal range, and our risk model provides the ability to "stress test" different reserve strategies. We cannot make a precise recommendation because a big part of determining a desirable reserve amount is the "risk appetite" of County officials. Officials who are risk averse may prefer more reserves. Those who are less averse and perhaps more sensitive to the opportunity costs of holding reserves may prefer less. The range accommodates different risk appetites while also providing assurances of staying above the critical threshold and avoiding the flat part of the curve in Exhibit 7.2. The table below summarizes.

CRITICAL THRESHOLD = Bond Rating: AAA or $9M		
A Reserve Policy typically expresses reserve targets as a percentage of expenditures or revenues. Below we have converted the dollar figures to a percent of Expenditures		
Dollars		Percent of Expenditures
$14.0 Million	80% confident of staying above critical threshold over five years	34%
$15.3 Million	90% confident of staying above critical threshold over five years	37%

Here are some other conclusions we can draw from the graphics presented on the previous pages:

- The County's ability to generate surpluses has an important impact on the chances that reserves go below thresholds. Later in the report we recommend a "structurally balanced budget policy" to help the be sure the County continues to consistently generate balanced budgets, if not surpluses.
- If the County generates surpluses, it must then choose to direct those surpluses towards building the reserves. The County's financial policies can support this.
- The County should remain mindful of the potential for extreme consequence events. A large flood, tornado, or "nuclear verdict" on an insurance claim could cause extreme costs. In Exhibit 1.2 the reader will notice that the red line extends very far to the right. This tells us that there is a small chance of some very extreme outcomes, such as those described above.
- The County should remain mindful of risks like a resolution to Act 10 that results in substantially higher labor costs. This would make it harder for the County to generate surpluses. We worked with County staff to develop an alternative surplus scenario around Act 10 in order to see how the model would be impacted. We found that the same reserve dollar amounts shown in the table above would only provide 40% to about 60% confidence in staying above the critical threshold.

To complement the reserve analysis, we offer several additional, supplemental recommendations, available in Section 7. GFOA has conducted extensive research into what it takes for local government to be financially sustainable. This research has shown that local governments require clear decision-making boundaries. Thus, many of our recommendations address boundary setting via financial policies.

Section 2 - Introduction

"Reserves" are the portion of a local government's fund balance that are available to respond to the unexpected. Reserves are the cornerstone of financial flexibility, sustainability, and continuity of existing service levels. Reserves provide a government with options to respond to emergencies and provide a buffer against shocks and other forms of risk. Managing reserves, though, can be a challenge. Foremost is the question of how much money is needed in a general fund reserve? How much is enough and when does a reserve become too much?

Jefferson County has been considering the implications that various extreme events, like natural disasters or recessions, could have on the County government's financial condition, particularly its reserve levels for different funds. The County engaged the GFOA to help it decide the appropriate reserve levels for the

general fund, given the risks faced by these funds. GFOA is a non-profit association of more than 24,000 state and local government finance professionals and elected officials from across North America. A key part of GFOA's mission is to promote best practices in public finance, including reserve policies.

GFOA's approach to reserves does not suppose "one-size-fits-all." Ideally, a local government's reserve strategy will be customized to the risk that the local government faces. For example, GFOA's "Best Practice" on general fund reserves recommends that general-purpose governments maintain reserves of no less than two months of regular operating revenues or regular operating expenditures (i.e., reserves equal to about 16.7 percent of revenues or expenditures), but that local governments should determine a reserve target that is most appropriate for their circumstances.[3] Therefore, GFOA worked with the County to conduct an analysis of the risks influencing the need for reserves as a hedge against uncertainty and loss.

We define "risk" as the probability and magnitude of a loss, disaster, or other undesirable event.[4] A thorough examination of the risk factors should lead to a range of desired reserves and improve the County's understanding of its overall risk profile. A risk-aware analysis helps the County *stress test* its reserve strategy.

[3] GFOA Best Practice. "Appropriate Level of Unrestricted Fund Balance in the General Fund." GFOA. 2009.

[4] Definition of risk taken from: Douglas W. Hubbard. *The Failure of Risk Management: Why It's Broken and How to Fix It.* John Wiley and Sons, Inc. Hoboken, New Jersey. 2009.

As a first step in this project, GFOA conducted a review of the risk factors influencing the amount of reserves a government should hold.[5] This review identified the risks on Exhibit 2.1 as the most salient risks to the County's general fund reserve.

Exhibit 2.1 – Primary Risk Factors that Influence Reserve Levels for Jefferson County

Financial / Economic Risks
Revenue source stability, particularly as it relates to the potential for revenue decline from an economic downturn
Retention on commercial insurance programs, including: deductibles, claims so large they exceed limits, and denied claims
The County's potential to generate surpluses or deficits in a normal year, outside of the impact of any of the risks described in this table.
Vulnerability to extreme events and public safety concerns, with emphasis on:
• Floods • Severe Storms (e.g., tornados) • Winter Storms • Unplanned, unavoidable infrastructure costs (e.g., critical failures in infrastructure) • "Unknown Unknowns"[6]

The next section gives an overview of how we analyze these risks and what you can expect to see in the rest of this report.

[5] The risk factors and basic review method were developed and published in the GFOA publication: Shayne C. Kavanagh. *Financial Policies*. (Government Finance Officers Association: Chicago, IL) 2012.

[6] We acknowledge that Exhibit 2.1 does not include every single risk that the County could experience. The "Unknown Unknown" models adds an additional element or risk that is calibrate to the historical frequency and cost of the "unconventional" uses of fund balance.

Section 3 - The Approach to Uncertainty

The accomplished forecasting scientist, Spyros Makridakis, suggests a "Triple-A" approach for dealing with highly uncertain phenomena.[7]

1. **Accept.** First, we must accept that we are subject to uncertainty. For example, the severity and timing of a very large flood is unpredictable. The County could go years without experiencing a serious flood or one could occur in the next twelve months!
2. **Assess.** Next, we must assess the potential impact of the uncertainty, with history providing a useful reference point. The experiences of other local governments are also a good reference point. For example, we used the historical experiences of Jefferson County and other relevant counties in Wisconsin to estimate the potential impact of future extreme events. However, historical experiences are not perfectly predictive of the future. That leads us to the next point…
3. **Augment.** The range of uncertainty we face will almost always be greater than what we initially assess it to be. Therefore, we must augment our understanding of risk beyond what our historical experiences show us. For example, very few people saw the 2008 Great Recession coming or thought it could be as bad as it was. They were unprepared for this historically unprecedented recession. We can augment our understanding of risk using a technique called "Probability Management."[8] Probability Management is an application of modern information processing technology that allows us to simulate thousands of potential events (e.g., floods, recessions, etc.) so that we can observe the probability of events of various magnitudes coming to pass. The statistical technique that Probability Management is based on is called "Monte Carlo analysis." This technique was established in the late 1940s, but until very recently required special computers and software to use. Modern information technology has made Monte Carlo analysis accessible to anyone with a personal computer.

Let's say a little bit more about how Monte Carlo analysis works. In essence, we create thousands of virtual "parallel universes" of Jefferson County. You can think of these as separate worlds and in each separate world the County's actual experience with the risks in Exhibit 2.1 is different. The difference is consistent with the statistical likelihood of the risks. For example, imagine there are 100 of these "parallel universes". Now imagine our analysis tells us there is a 10% chance of recession. Then 10 of these "parallel universes" would have a recession and 90 would not. The same is true for every risk in Exhibit 2.1. So, some parallel universes would experience several events, while lucky ones might experience none at all! The magnitude of these events would also vary. For example, imagine two different parallel universes experienced a flood. One might experience an extreme flood, while the other might experience a less severe flood. The magnitudes and the frequency with which those magnitudes occur are also consistent with relevant statistics for the risk in question. The analysis that provided those statistics for the risks in Exhibit 2.1 is discussed in Section 4 of this report.

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[7] See: Spyros Makridakis, Robin Hogarth, and Anil Gaba. *Dance with Chance: Making Luck Work for You*. (Oneworld Publications: Oxford, England). 2009.

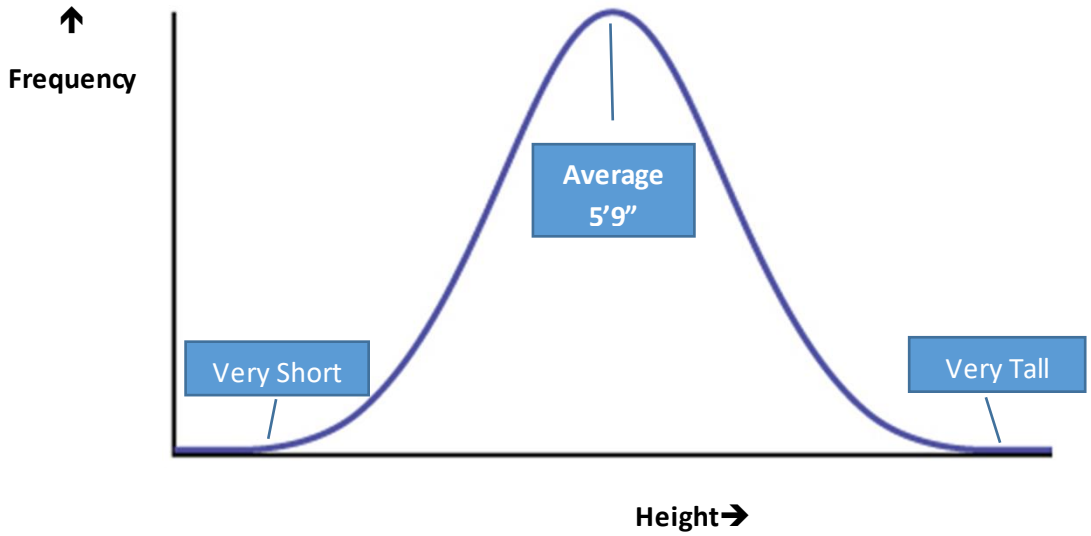
[8] The discipline of "Probability Management" was developed by Dr. Sam Savage, author of *The Flaw of Averages*. You can learn more about Probability Management at probabilitymanagement.org.

To use Probability Management and Monte Carlo Analysis, we express any given type of extreme event as a range of possibilities that the County might experience. This range is called a "distribution." A distribution is a shape that signifies how frequently the County might expect to experience a certain type of event and/or how severe the event might be.

The most common type of distribution is called the "normal distribution," more popularly known as the "bell curve." Many phenomena fit a bell curve. To help us understand how to read a distribution, we can start with an example that is related to everyday life: the height of American men.

Exhibit 3.1 shows a bell curve for the height of American men. The horizontal axis of Exhibit 3.1 represents height. The vertical axis represents frequency. The most common height is 5'9", so it is shown at the top of the curve. Much taller men, like NBA centers, would be found on the right-hand side of the curve. Very short men would be found on the left.

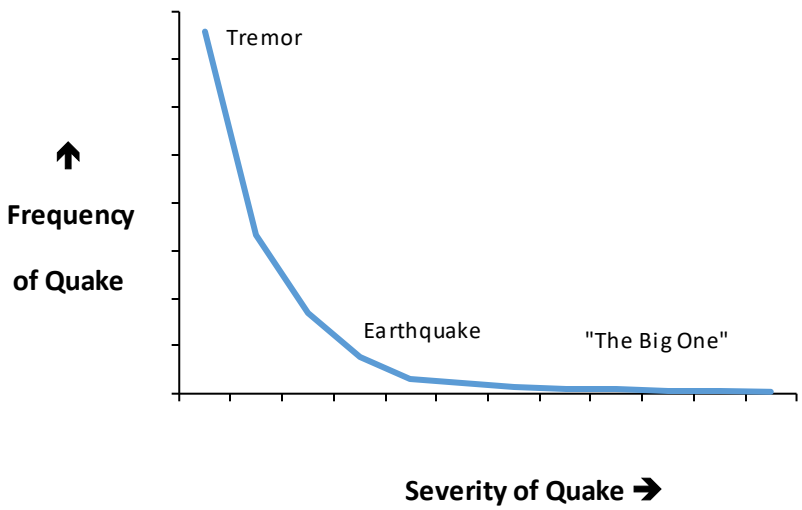
Exhibit 3.1 – The Normal Distribution for American Men



The normal distribution can help analyze risk. To illustrate, the severity of an economic downturn is roughly normally distributed. A few downturns are slight, few are severe, but most are closer to average.

Another type of distribution we use in our analysis is an asymmetrical distribution, shown in Exhibit 3.2. Natural catastrophes often fit an asymmetrical distribution. Earthquakes are a classic and well documented example. Exhibit 3.2 shows that tremors are the most common. Full-fledged earthquakes are relatively rare. The distribution is "asymmetrical" because the frequency with which we will experience these events are not evenly distributed around the middle of the distribution. Put another way, there are far more tremors that are smaller than the "average" earthquake. Yet, there are far fewer earthquakes ("the big one") that are larger than the average earthquake.

Exhibit 3.2 – Sample Asymmetrical Distribution



Expressing the County's vulnerability as distributions allows us to calculate the probability that an event of a given magnitude will come to pass. When we associate a dollar amount with that event, we can estimate the probability or chance that the County will need to have a given amount of money on-hand to respond.

Exhibit 3.3 is not a distribution but is a type of graphic we will use in this report. It is called a "cumulative probability chart." This graph in Exhibit 3.3. is a cumulative probability chart of the total losses from recessions (before any budget cuts) over a ten-year period. To illustrate, the 80% mark intersects with the blue line at about $6.8 million, which means that there is about an 80% chance that total losses from recessions over a ten-year period will be $6.8 million ***or less***. This is very useful information for optimizing the County's reserves because it tells us the size of losses for which we should prepare.

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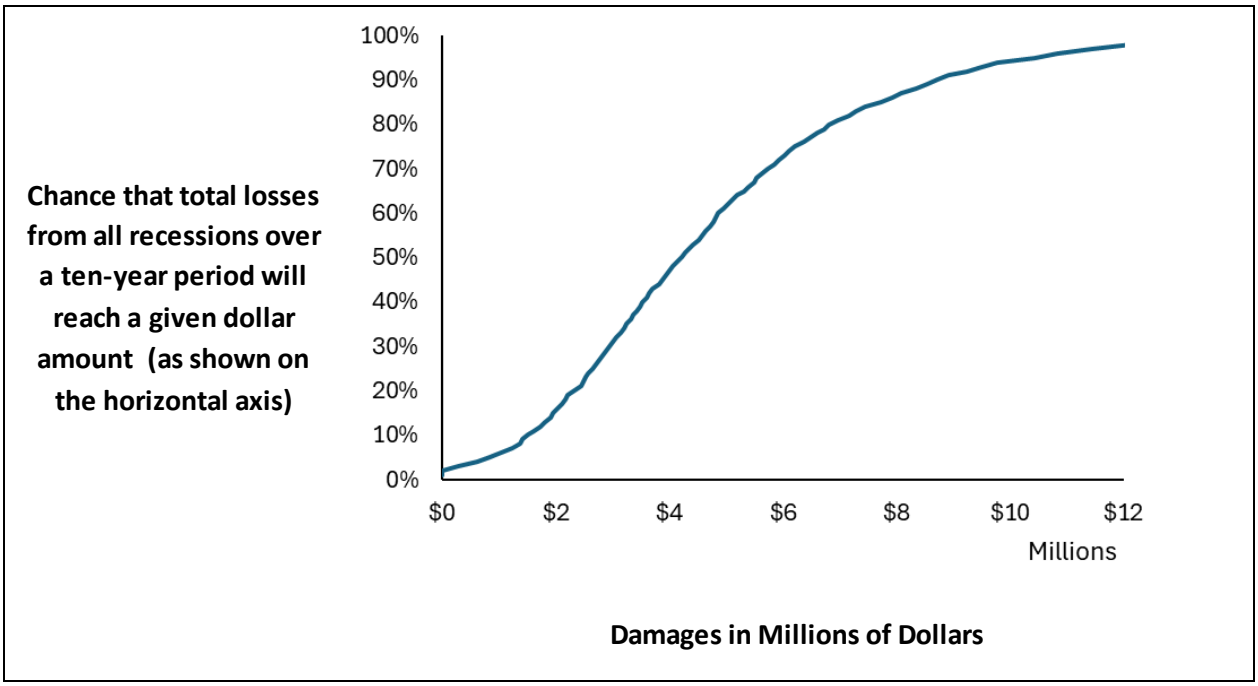
Exhibit 3.3 – Cumulative Chance of Losses from Recessions over a Ten-Year Period



It is important for the reader of this report to understand that **there is never one single, objectively best amount of reserves to hold**. The amount of reserves the County will want to hold will partially be a function of the County's willingness to take on risk. If County officials are willing to take on risk, they might opt for lower reserves and spending more money on current services. If officials are more risk averse, they might opt for higher reserves. GFOA's findings are informed by where reserves appear to provide the best value or "bang for the buck." The spot on a cumulative probability chart, like Exhibit 3.3, before where the line begins to flatten out is usually where the best bang for the buck lies.

It is also important for the reader to appreciate that this analysis is focused mostly on "shocks" that could befall the County – sudden, sharp, temporary, unplanned, unavoidable losses. "Stresses" or long-term drags on revenue or expenditures pressures are not the focus of the analysis because these pressures should be dealt with through the budget process. There is one very important exception to this: our model does include the County's chance of generating surpluses and deficits each year. This is discussed more in Section 4.

In Section 4, we give a brief overview of the major kinds of risk our analysis covers. Section 5 goes into greater detail on the analysis of each risk, for those readers who are interested. Section 6 describes the secondary risks – the risks that were not judged impactful enough to be included in our risk model. Section 6 also describes how bond rating agencies look at reserves and fund balance. Finally, Section 7 describes how all the pieces of this report come together to make a recommendation for the County's future course of action on reserves.

Section 4 - Overview of Primary Risks Analyzed

The purpose of this section is to provide a broad overview of the primary risks that we analyzed. This provides context for the reader as you make your way through the report. Readers who are interested in the final results of the analysis may wish to go to Section 7.

Financial / Economic Risks

Recessions. Jefferson County faces revenue volatility risks during economic downturns, primarily impacting property tax and sales tax, which together make up over 57% of its revenue. Historical analysis of the 2001 and 2008 recessions provides benchmarks for assessing these vulnerabilities. Gross receipt taxes are a notable vulnerability because of their importance to the County's revenue portfolio and because the GRT responds quickly and sharply to recessions. For example, the sales tax declined by over 10%, within a year, during both the 2008 Great Recession and the 2001 Dot.Bomb Recession. Even revenues with a reputation for stability, like property tax, can be impacted, though certainly not as much as sales tax. Property taxes had less severe impacts and delayed impacts, [9] allowing the County more time to manage budget adjustments. Some of the County's other revenue sources (intergovernmental, charges for service) had sizable declines, in percentage terms. However, because these revenues are a small part of the County's revenue portfolio, the overall impact on the County's financial position is not as important as sales tax. These historical patterns inform the County's risk simulation model, anticipating both timing and severity of revenue impacts during future recessions.

The risk model simulates the frequency of future recessions according to historic frequency, duration, and spacing between the recessions. The magnitude of a given recession is simulated based on the observed decline in the County's revenues during the 2008 recession and GFOA's research into how the 2001 recession impacted local government revenues. 2008 was the worst recession since World War 2, while 2001 was one of the mildest, so provide two "book ends" that represent the plausible impact of a recession.[10]

Surpluses/Deficits. Fund balances and reserves are the accumulated effects of annual surpluses and deficits over the years. Future surplusesor deficits would, therefore, impact the County's ability to maintain sufficient reserves going forward. The Risk Model simulates future surpluses and deficits based on the historical frequency of surpluses and deficits combined with County staff's expectations for surpluses and deficits, based on their hands-on knowledge of County finances.

Retention on insured risks. The County purchases commercial insurance to protect against risks like liability claims and workers' compensation claims. Almost any commercial insurance policy will entail some "retained risk" for the buyer – that is the damages from an event that the insurance policy does not cover. Major sources of retained risk include:

[9] By "delay" we mean that the decline in County revenues doesn't happen until at least a year after the recession. This contrasts to a revenue like the sales tax where the decline to County revenue happens within the same year.

[10] Technically, the distribution we used was open ended so the simulation can produce recession worse that 2008 or milder than 2001, though the Risk Model is unlikely to produce such results (just like such results are unlikely in real life)

- Deductibles paid.
- The risk that claims exceed the coverage limits, either claim by claim or in aggregate.
- Claims that trigger an exclusion (e.g., liability claims that are deemed gross negligence).

The risk model simulates retained risk and its potential impact on County reserves.

Extreme Events

Floods. Floods were rated the most important risk by the "Jefferson County Natural Hazards Mitigation Plan: 2019-2023" (or just "Hazard Plan"). Our analysis uses historical records and FEMA data to simulate future floods.

Severe Storms. Tornados and thunderstorms were the second and third highest rated risks in the Hazard Plan. We obtained severe storm simulation data for Jefferson County from Aon, a global insurance giant. We integrated Aon's data into the risk model.

Winter Storms (snow and ice). We obtained 30 years of snowfall history for Jefferson County. We also obtained several years of cost for County to remove snow. These two things together allowed us to simulate the chance that Jefferson County could exceed its snow removal budget and by how much.

Unplanned, unavoidable infrastructure costs. The County operates several kinds of capital assets (buildings, roads, etc.). A critical failure in a key asset would cause the county to incur unplanned, unavoidable expenditures to repair or replace the asset. We simulated the chance the County would exceed it budgetary capacity to pay for critical infrastructure failures in a given year.

"Unknown Unknowns" or Miscellaneous Hazards. The extreme events described above are not the only ones that could possibly impact the County. Therefore, we have a "miscellaneous hazards" component that simulates the possibility of losses from unknown sources based on the frequency and size of losses from unexpected sources in the past. These could be rare and large (e.g., a major hazardous material release) or as small and relatively minor as a large urban fire.

Section 5 - Details of the Approach of Risk Analysis

In this section we will provide a deeper look into how we approached the General Fund's exposure to the risks we described in Section 4. Readers looking for the results of the analysis may wish to go to Section 7

A. Financial / Economic Risks

Recessions. Revenue volatility posed by economic downturn is one of the important risks for local governments. In those "rainy days," governments may face the urge to use reserves in response to a revenue shortfall. This part of the report provides an analysis of the County's vulnerability to revenue downturns. Based on the understanding of the County's revenue profile, we break down the revenue sources into five main categories: 1) property tax, 2) sales tax, 3) intergovernmental revenues, 4) charges for services, and 5) other sources of revenues, as shown in Exhibit 5.1.A. Property tax and sales tax constitute the primary sources of revenue for Jefferson , collectively accounting for roughly 60% of

County's total revenues. The remaining revenue is derived from intergovernmental sources, including both state and federal grants and transfers, charges for public services, and various other miscellaneous income streams.

Exhibit 5.1.A – Relative Importance of County Revenues, based on 2024 Estimated Actuals

Major Revenue Sources	Percentage
Property Tax	36.1%
Sales tax	21.85%
Intergovernmental Revenues	19.07%
Public service charges	8.71%
Others	14.27%
TOTAL	***100%***

To assess the potential impact of a recession, we focused on two significant past events: the 2001 "dot-com recession" and the 2008 "Great Recession." Our analysis does not consider the COVID-19 recession comparable to these two recessions, as it did not result from conventional economic causes and exhibited different behavior. For instance, the COVID-19 recession entailed a record decline followed by a swift recovery. Nevertheless, this does not imply that we disregarded the effects of COVID-19. Risks stemming from unconventional sources, such as pandemics, are addressed in a subsequent section of the report.

We used the County's historical data for the period of 1999 to 2024 to address how each of the revenue sources in Exhibit 5.1.A was impacted during the recessions. The 2008 recession (the Great Recession) was the most severe in terms of GDP decline since World War II, while the 2001 recession was one of the mildest. Therefore, we used these two recessions as approximate "boundaries" for simulating the range of possible future recessions.[11] Here are a few key points about the simulation of each major revenue source in Exhibit 5.A.1.

Exhibit 5.1.B – Recession Impact on County's Major Revenue Sources

	2008 Recession impact		2001 Recession impact	
Top 5 revenue sources	**Year of first decline**	**Biggest decline**	**Year of first decline**	**Biggest decline**
Property Tax	3	21%	3	3%
Sales tax	1	22%	1	12%
Intergovernmental Revenues	1	13%	1	9%
Public service charges	1	2%	3	18%
Others	1	16%	3	4%

[11] It is important to acknowledge that for our analysis, we use the 2001 and 2008 recession data as reference points; however, the range for recession impact can vary with open-ended distribution.

- **Property Tax.** The most significant finding is that Jefferson experienced a decline in property tax revenue three years after the onset of the Great Recession. GFOA has observed similar trends in numerous other counties: due to the administration of property taxes, local governments do not immediately feel the impact of a recession on property tax revenues. This phenomenon is crucial as it spreads out financial losses from a recession over multiple years, which makes managing the economic downturn somewhat easier. Consequently, the County can avoid making severe budget cuts in any single year and has more time to respond. Potential declines in property tax revenues tend to be less severe than those in other revenue streams. During the Great Recession, the worst continuous 12-month performance resulted in a 21% decrease in property tax revenue. The impact of the 2001 recession was more subtle and immediate, with a 3% decrease in the first year following the event.

- **Sales Tax.** This revenue source is the second most significant for Jefferson and was moderately affected by both recessions. The impact of economic downturns on this revenue was observed immediately, with a decline noted in the first year following each recession. Specifically, this revenue source decreased by 22% after the 2008 Recession and 12% following the 2001 Recession.

- **Intergovernmental Revenues.** This source of revenue makes up approximately 19% of the County's total revenues. The recessions left a moderate impact on this revenue stream. The declines were 13% following the Great Recession and 9% following the 2001 recession.

- **Public Service Charges.** On average, revenues generated from public service charges account for approximately 8.71 % of the County's total revenue. Notably, this revenue source experienced a greater decline following the 2001 recession than during the Great Recession of 2008. The most significant decrease after the former was 18%, while the latter saw a reduction of 2%.

- **All other revenues.** Approximately 14% of the County's revenues come from miscellaneous revenue streams. During the 2008 Great Recession, these revenues experienced an average decline of 13%. The corresponding figure was 9% following the 2001 recession. Like other major revenue sources, the impact was observed in the first year following both recessions.

Based on this input, we utilized historical data on the frequency and duration of recessions from 1950 onwards to simulate future recession patterns. The magnitude of each recession was simulated using the parameters described above. For example, if the risk model simulates a severe recession, then we used the County's experience from the Great Recession to simulate what a severe recession might look like for each revenue category.

We analyzed the timing of declines in various revenue streams relative to each other. For example, gross receipt tax declined prior to property tax revenues during the 2008 Great Recession. Consequently, the Risk Model reflects this: property tax declines after the other revenues categories.

The model does include assumptions about the County's potential for cutting expenditures in response to a recession. This is addressed in more detail in Section 7 of the report.

Surpluses/Deficits. The County's fund balance is a summation of its successive surpluses and deficits over the years. Because the risk model covers a ten-year period, it is important to account for the role of

surpluses and deficits to build or erode the reserve over time. We worked with County staff to develop calibrated estimates for the likelihood of generating a surplus or a deficit in a given year. Based on staff expertise and understanding of the County's current financial condition and future expectations, we developed a baseline assumption that a normal surplus or deficit is 90% likely to fall between -5% (a deficit) and +5.5% (a surplus). This means there is a small chance (5%) of a deficit greater than 5% and a small chance (5%) of a surplus greater than 5.5%. The average surplus is assumed to be 0.25%. This is generally consistent with County's past history of generating surpluses but is scaled down (smaller surpluses assumed) to account for increasing expenditure pressures and limitations on revenue growth foreseen by County staff.

It is important to note that these assumptions for a typical surplus are independent of all other risks in the risk model. For example, if the model simulates a recession to occur in a given year, then the assumption for a normal surplus is overridden in favor of the recession assumptions (a recession is an abnormal year). Similarly, the cost of a natural catastrophe might more than erase the County's surplus in a given year.

Finally, the model includes an option to replace surplus/deficit assumptions above with an alternative set of assumptions to reflect even tighter financial conditions, which could arise from state legislation unfavorable to the County's bargaining position for organized labor. This could result in higher personnel costs. Thus, the alternative scenario provides for a 90% confidence interval of -13% to +2% for the first two years of the simulation. The intent is to provide for a much higher chance of deficit to reflect higher personnel costs. It was assumed that for the 3rd through 10th years of the simulation that County will adjust its cost structure to get back to a surplus/deficit profile identical to the baseline scenario. (90% confidence interval of -5% to +5.5). The risk model allows the user to replace baseline scenario with the alternative and observe the result. In this report, we will always assume the baseline scenario is active, unless specifically noted otherwise.

Retained Risk and Commercial Insurance Policies. Commercial insurance policies very often include some amount of "retained risk" – risk that the insured retains because the policy does not cover all possible losses. These most commonly experienced retained risk for the holder of an insurance policy is deductibles. This could present some risk the County's general fund reserve if the County experienced a large number of expensive claims (i.e., it had to pay out large deductible amounts).[12] Retained risk also includes the potential for two kinds of low-frequency, high-consequence risks: 1) A claim that exceeds the limits of the County's insurance policy (in most cases, the limit is $15 million); and 2) A claim that is denied for reasons of gross negligence or other egregious behavior on the part of the County that triggers an exception in insurance policy. These represent two sources of "nuclear" claims that could stretch into multi-million-dollar losses. A "nuclear" claim is one that explodes into multi-million losses and which stems from highly unusual (and catastrophic) circumstances.

[12] Technically, the County policy provides a "self-insured retention" and not a "deducible." The risk model takes into account the small technical difference, but we use the term "deductible" in this report in the interest of making the terminology more accessible to the non-expert.

In order to model these risks, we first gathered data on historical claims from the County's insurance pool, the WMMIC (Wisconsin Municipal Mutual Insurance Company). This helped as estimate the frequency of claims and the typical range of costs of claims. Figures from the broader WMMIC pool were compared to Jefferson County's own experience to see if Jefferson County was substantially different from the larger pool's experience in any important way. Jefferson County did not prove to be much diffe rent. We used this information to simulate the number of and cost of claims in the future, which allowed us to simulate the County's deductible costs.

Because "nuclear" claims are so rare, Jefferson County's own experience or even just the WMMIC pool's experience is not adequate. For example, if the County or the WMMIC has never experienced a nuclear claim for some given line of coverage, let's say auto liability, does that mean such a claim is impossible? Of course, it does not. So, we had to go beyond the data available from Jefferson County or WMMIC. We started by using artificial intelligence (AI) "deep research" capabilities. These are specialized AI tools that plan and run multi-step investigations across many sources (web, papers, datasets), read long documents, cross-check evidence, and produce source-backed syntheses. Compared to a regular AI "chat" that most people are familiar with, deep research AI delivers artifacts (memos, tables, briefs, code) with explicit provenance/citations/sources We used deep research tools to look for information that could suggest parameters for claims that exceed limits or are denied. Specifically, we asked for odds that a given claim would exceed the County's limits or would be denied for reasons of gross negligence or other similar egregious behavior. We used deep research models from two leading AI companies, OpenAI and Google. We asked each model to conduct its own independent investigation and to give the rationale for its findings. Both models produced remarkably similar estimates. We then shared the results of the AI models with County staff to "gut check" the results and help make sure the AI models did not make any erroneous assertions about the County's risk environment.

It is important to understand that claims that exceed limits and are denied are both very rare events. For example, the line of insurance judged most likely to exceed limits or have a claim denied is law enforcement and public officials. It was judged to have a 1 in 225 chance of exceeding the County's $15 million limit and a 1 in 1,750 chance of being denied. The other lines of insurance were judged to be at much less risk than that. So, while the risk is remote, the model does capture it.

Finally, the simulated retention from the model was compared to an estimate of the County's regular budget for retained risk. The County budgets each year for deductibles. This budget would need to be exceeded before the County's reserve is impacted.

B. Extreme Events

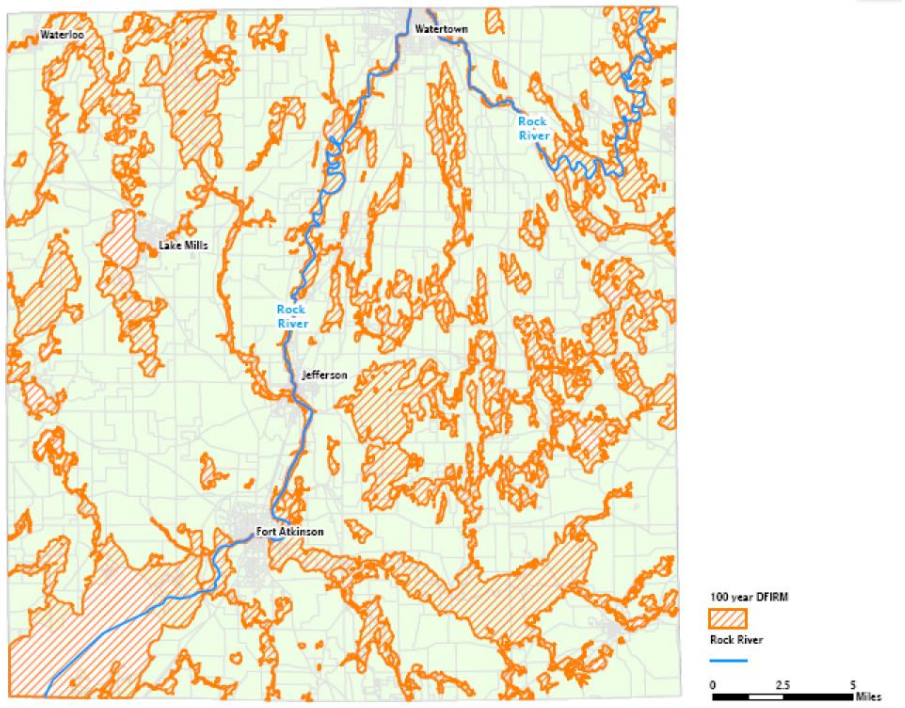
In this section we'll describe important details about the extreme event risks we analyzed. Before getting into the details of each one let us cover a few points germane all extreme event risks.

- The data for storms was sourced from Aon, a very large international insurance and risk management company. Aon provided a simulation of the potential impact on the entire county, including all public agencies in Jefferson County. GFOA took this data, integrated it into the model, and allocated a portion of the damage to the Jefferson County government.

- Each hazard simulation addresses the possibility for outside reimbursement. The approach was slightly different for each hazard.
- The model uses historical FEMA loss data for natural catastrophes to estimate losses for future events. FEMA does not reimburse for insured losses. This means that the County's insurance coverage is implicitly included in the model in the form of an assumption that the County has about "average" insurance coverage compared to other local governments.
- We consulted the "Jefferson County Natural Hazards Mitigation Plan: 2019-2023" for all of the risks we describe here. Well refer to this document as just the "Hazard Plan" for convenience.

Floods. Flooding is the only risk in the Hazard Plan described as a "high" risk for any part of the county. According to the Hazard Plan, Presidential disaster declarations were issued in Jefferson County for flooding in 1973, 1976, 1993, and 2004. There has only been one disaster declaration for something other than floods (the other was severe storms). Exhibit 5.B.1 shows a map, from the Hazard Plan, of the county region and areas that fall within a 100-year flood plain (i.e., a flood is expected to be 1 in 100 years). As you can see, many areas of the county fall within a 100-year flood plain.

Exhibit 5.B.1 – 100 Year Flood Plains in the Jefferson County Region.



The risk model provides for the possibility of floods from very minor (10-year flood) to massive (1000-year flood). Each size of flood has an associated range of damages, where minor floods result in very low costs for the County and major floods result in considerable costs. The costs for major floods were derived

from FEMA records for past floods in Wisconsin counties. The model also includes a growth rate in the potential damage from floods to reflect the possibility of a wetter climate in Wisconsin.[13]

The model assumes FEMA assistance for 100-year floods and above. It assumes 75% reimbursement from FEMA. The model also assumes that the County will not recover every last dollar that is FEMA eligible. We find it is not uncommon, in the aftermath of extreme event, for records to be less than perfect. Hence, some eligible expenses (10%) may not be submitted to FEMA. Finally, the model assumes it takes 2 years to get reimbursed by FEMA.

Storms. The Hazard Plan describes hail, thunderstorms, and tornados as "medium" risks across the County. Tornados and thunderstorms were the second and third highest ranked hazards in the Hazard Plan, behind floods. Tornados were part of Presidential disaster declarations for Jefferson County in 2003 and 2008.

For storms, we sourced simulation data from Aon. Our simulation from Aon produced potential damages to all public entities in the County. To determine a portion applicable to the County we looked at disaster history across Wisconsin to determine the relative exposure of county governments, compared to other types of public agencies, using FEMA data. We found that the average was 15%. We can compare this to Jefferson County's actual experience during the 2008 flood, where the County government experienced 18% of the FEMA reimbursable losses.

The model also makes allowances for other funds absorbing some of the losses. For example, FEMA records show that highways are often impacted by natural catastrophes like storms and floods. Thus, it stands to reason that the County's highway fund could also be impacted.

The model assumes FEMA assistance for 100-year storms and above. It assumes 75% reimbursement from FEMA. The model also assumes that the County will not recover every last dollar that is FEMA eligible. We find it is not uncommon, in the aftermath of extreme event, for records to be less than perfect. Hence, some eligible expenses (10%) may not be submitted to FEMA. Finally, the model assumes it takes 2 years to get reimbursed by FEMA.

Winter Storms (Snow and Ice). According to the County's Natural Hazards Mitigation Plan 2025-2029 [14], winter storms – particularly heavy snowfall [15] – is one of the significant risk factors for the entire state as well as the County. Substantial snowfall may undermine the structural integrity of flat-roofed buildings, increasing the risk of roof collapse and subsequent economic losses. The report mentioned that in recent

[13] Zachary Schuster and Kenneth Potter in "Assessing the Effects of Climate Change on Precipitation and Flood Damage in Wisconsin" (August 2012 issue of Journal of Hydrologic Engineering 17(8):888-894) showed "significant but modest increases [in precipitation] of approximately 11% over the next 50 years."

[14] Retrieved from: https://www.jeffersoncountywi.gov/departments/emergency_management_department/emergency_management_plans.php

[15] The report defines "heavy snowfall" as the accumulation of six or more inches of snow in a 12-hour period or eight or more inches in a 24- hour period.

years, several winter seasons have severely challenged the financial and operational capacities of local governments to maintain roadways and manage snow removal effectively.

Across Wisconsin, significant snowfall events typically occur approximately five times each winter. In southern Wisconsin, total seasonal snow accumulation averages between 40 and 50 inches. Although blizzard conditions are possible in this region, they remain uncommon. Ice and sleet storms may take place any time from October through April, with a higher frequency noted in southern Wisconsin compared to the northern areas of the state. Additionally, there are generally three to five statewide incidents of freezing rain annually.

Between 1950 and 2023, Jefferson County experienced 190 winter storm events, including blizzard conditions, heavy snowfall, ice, and sleet. This equates to an average of approximately 2.6 such events per winter season.

We conduct a cost simulation for snowfall events by utilizing historical snowfall data from the County alongside corresponding estimated costs. The former dataset was sourced from Weather Works, while the latter was obtained from the County's internal records. Both datasets are used in our linear model to estimate the correlation between snowfall amounts and associated costs at a 95% confidence level. Over the past two decades, the recorded snowfall measured 83.7 inches per sleet event, with related costs amounting to $1,500,000 (adjusted for inflation).

The Monte Carlo technique is applied to simulate the frequency and magnitude of snowfalls over the forthcoming ten years, and these results serve as inputs for the previously described model to project the total costs the County may incur due to snowfall. The simulated costs range from $490,000 to $1,000,000 for any individual snowfall event anticipated within the next decade.

The model also incorporates FEMA's support by establishing both the upper and lower reimbursement thresholds at the 80th percentile. It further presumes that the County will not recoup the entirety of FEMA-eligible funds, with a reimbursement rate between 15% and 40%. Additionally, the model anticipates a two-year period for processing FEMA reimbursements.

Unplanned, unavoidable infrastructure costs. The County operates several major categories of infrastructure: buildings, roadways, IT equipment and fleet. The County could experience a critical failure in infrastructure that requires an unplanned, unavoidable cost to repair or replace the infrastructure.

To simulate this risk, we first met with subject matter experts among County staff for each of the abovementioned types of infrastructure. We worked with them to generate calibrated estimates for the annual chance of a critical failure for each category of infrastructure and to get a range of possible costs for a failure in each category.

We took this information and built a model that not only simulated the occurrence of a failure within each infrastructure category in a given year but also addressed the possibility of more than one failure within a category in a year or failures across multiple categories in a year. The chance of failure in most categories was low (less than 10% annual chance), but the chance for building and grounds was higher than the other categories (25% annual chance). The model also accounts for the fact that the regular County budget does

have some capacity to absorb relatively minor infrastructure failures (less than $500,000). So, the reserves are only impacted by either very large failures or several failures occurring in a single year.

Miscellaneous Hazards or "Unknown Unknowns." The extreme events described above are not the only ones that could possibly impact the County. Therefore, we have a "miscellaneous hazards" component that simulates the possibility of losses from unknown sources based on the frequency and size of losses from unexpected sources in the past. These could be as rare and as large (e.g., a major hazardous material release) or as small and relatively minor as a large urban fire. We gathered data on the frequency of such events from other local governments of comparable size to Jefferson County. Interestingly, these other local governments experienced miscellaneous hazards at a surprisingly consistent rate, when factoring in their different populations! We also got cost impacts from these other governments as well as reimbursement information. The potential costs of these events are low compared to the other risks we analyzed. However, we also provided a 1 in 50 chance of a potentially much larger event, to simulate something on the scale of a global pandemic (global pandemics are thought to be roughly 1 in 50-year events).

The model also includes reimbursement for miscellaneous hazards. The reimbursement assumptions provide for a wider array of outcomes than the other hazards we have reviewed, reflecting the diverse nature of the types of events the County might encounter. Reimbursement could range from nothing at all to 100% (the local governments we worked with experienced both ends of the spectrum and everything in between).

Section 6 - Secondary Risks

Prior sections of this report reviewed the risks of the greatest financial consequence to the County. In this section we briefly review other risks that we considered, but that did not appear to be as important to the County's reserves as the other risks we examined. This is not to say that the County should not prepare for these risks or that they are not important. It is only to say that these events were not included in the scope of our analysis because of the low potential impact on the County's reserve strategy.

Also, in this section we examine how the County compares to bond rating agency benchmarks for fund balance.

A. Secondary Risks

We identified several risks that are not primary to our risk analysis. These "secondary risks" are not primary risks because they are low probability, of low severity, or both.[16] These risks were not specifically modeled, so we did not *directly* address them in Section 5. Recall, however, that the Risk Model does include a "miscellaneous hazards" component to pick up losses from unexpected sources. Secondary risks could be considered unexpected sources of loss. The table below lists the natural hazards that we consider primary and secondary risks. They are in the order ranked by the County Hazard plan.

GFOA Category	Rank Order of Hazards from Hazard Plan
Primary	1-Floods (riverine)
	2-Tornado / High winds
	3-Thunderstorms
	4-Snow and Ice
Secondary	5-Extreme temperature
	6-Drought
	7-Wildland fire
	8-Ice shoves
	9-Dam failure
	10-Flooding – storm water
	11-Land failure
	12-Earthquake

Some items on this list are what we might call "high-frequency, low-consequence events." Extreme temperatures are a good example. There may be several high-heat days in a year, but high temperatures do not have the same potential for widespread injury and destruction as a major flood or tornado, for instance. A major flood or tornado is a "low-frequency, high-consequence event." High-frequency, low-consequence events very rarely, if ever, cause extraordinary expenditures so high that the County's reserve would be impacted.

Other items on the list are not high frequency (e.g., earthquake, dam failure), but the Hazard Plan did not consider the to be a serious concern. In fact, earthquakes and dam failure both received the lowest possible score in the Hazard Plan's risk scoring system (tied with land failure and storm water flooding).

Finally, extreme temperatures were the 5th highest rated risk by the Hazard Plan. All risks above that were considered "primary risks" for our purposes. Importantly, there was a notable drop off in the Hazard Plan's scores past fourth place. To illustrate, the highest rated risk by the Hazard Plan was floods and it received 24 points under the Hazard Plan's scoring system. Snow and ice storms where 4th place with 20 points.

[16] This could be low intrinsic risk or because the County has transferred the risk via commercial insurance.

Extreme temperatures had 16 points. This big gap between 4th and 5th place suggests the first four risks on the Hazard Plan's ranking system stands apart as the most pressing hazards.

Human-caused extreme events. Human-made disasters like power outages, major crime or even terrorism events could all be sources of unplanned expenditures. Our work with other local governments has suggested that losses from most of these types of events are often (but not always) relatively low cost (measured in hundreds of thousands of dollars, not millions). The "other hazards" model we included does provide an allowance for events that might be of sufficient magnitude to impact reserves.

B. Comparable Analysis

This section provides a comparison of Jefferson 's fund balance against external standards for ***fund balance***. This analysis offers the County a basis for determining its own ***reserve*** levels. Reserves constitute a portion of ***the fund balance.*** However, publicly available financial records frequently do not differentiate between a government's overall fund balance and the amounts held in reserve for purposes such as self-insurance. Consequently, we examine the entire fund balance and benchmark it against the standards employed by both S&P and Moody's bond rating agencies for credit score assignments.

Moody's assigns ratings from Aaa, representing the highest quality, to C, indicating the lowest. Similarly, Standard & Poor's (S&P) utilizes a scale that ranges from AAA at the top end to D at the bottom. Both agencies use fund balance ratios to determine the ratings.[17] S&P rating methodology mainly concerns the fund ratios related to general fund. In particular, the methodology introduces two key metrics for rating: 1) ***Available Fund Balance Ratio***, and 2) ***Unassigned Fund Balance Ratio***. In specific, the ***Available Fund Balance Ratio*** is the most critical metric, defined by the percentage of *available fund balance* to *total expenditures* of general fund. The *available fund balance* includes *unassigned, assigned* and *committed* fund balances. The formula for this ratio is:

[17] It is important to acknowledge that their rating methodology considers many other factors. Within the scope of this analysis, we just focus on fund ratio rating.

Available Fund Balance Ratio =

(Unassigned Fun Balance + Assigned Fund Balance + Committed Fund Balance) / General Fund Expenditures

The ***Unassigned Fund Balance Ratio*** focuses on the most flexible portion of reserves. This ratio is used to evaluate a government's resilience during economic downturns. The formula for this ratio is summarized below:

Unassigned Fund Balance Ratio = Unassigned Fund Balance/General Fund Expenditures.

Both ratios use general fund expenditures as the denominator. In this analysis, these expenditures include transfers to other funds, reflecting their role as recurring obligations of the general fund. Exhibit 6.B.1 summarizes S&P's fund ratio calculations using S&P's methodology.[18] The County's ***Available Fund Balance*** ratio is 95%, while the ***Unassigned Fund Balance*** ratio is 70%. S&P does not use fixed thresholds for its ratings. However, previous reports and public sector guidelines indicate that a ratio over 30% is typically associated with a AAA rating, and ratios between 15% and 30% are generally associated with an AA rating. Therefore, County's both ***Available Fund Balance*** and the ***Unassigned Fund Balance*** ratio exceed the AAA-rating benchmark.

[18] Data from Jefferson 's fund balances is collected from the County's 2024 ACFR: https://cms4files.revize.com/jeffersoncountynew/Reports/Misc.%20Annual%20Reports/ACFR.pdf

Exhibit 6.B.1: Jefferson's Fund Balane Ratios as per S&P's Methodology

Calculation of Fund Balance Ratio as per S&P's Metholodogy	
Step 1: Get available fund balance	
Assigned	9,603,679
Unassigned	26,342,559
Committed	870,840
Total Available Fund balance	36,817,078
Step 2: Get total GF expenditures	
GF Expenditures	37,381,503
Transfer out	1,325,000
Total GF Expenditures	38,706,503
Step 3: Get Fund Balance Ratios	
Available Fund Balance Ratio	95%
Unassigned Fund Balance Ratio	70%

Moody's also utilizes the ***Available Fund Balance*** ratio for their rating, which compares the fund balance to revenues. It is critical to note that Moody's considers the fund balance across the entire government, not just the general fund. Their rationale is based on the premise that a government would utilize fund balance from any of its holdings to avoid defaulting on debt payments. Moody's evaluates creditworthiness by the likelihood of debt repayment. Moody's basic formula for ***Available Fund Balance*** ratio is:[19]

Available Fund Balance Ratio = (Available Fund Balance + Net Current Assets) / Revenue

Exhibit 6.B.2 presents a summary of fund ratio calculations for Jefferson as of the end of the fiscal year 2024. Notably, the table indicates that the overall ratio for all County government is 62%. According to Moody's standard, an Aaa rating requires a ratio exceeding 35%, suggesting that Jefferson is performing well by this measure. The table also reveals that if the scope is restricted to governmental funds alone, Jefferson still meets the Aaa standard with a fund ratio of 44%. While our table does not isolate general fund balances, it is worth noting that the general fund balance closely aligns with the grouping of governmental funds.

[19] Moody's documentation describes nuances to calculate this formula, which we have included in our calculations.

Exhibit 6.B.2: Jefferson's Fund Balance Ratios as per Moody's Methodology

Calculation of Fund Balance Ratio as per Moody's Metholodogy

Step 1 - Get Total UNRESTRICTED Governmental Fund Balance	
Total from ACFR	38,190,735
Subtract amount that City plans on spending in near term	-
Total Unrestricted Governmental Fund Balance	**38,190,735**
Step 2 - Get Total Net Current Assets from Proprietary Funds	
Total Net Current Assets from ACFR	19,486,315
Total Net Current Assets	**19,486,315**
Step 3 - Get Total Revenues	
Total Governmental Fund Revenues	86,518,719
Total Proprietary Fund Operating & Non-Operarting Revenues (excludes Internal Service Operating)	6,097,783
Total Revenues	**92,616,502**
Step 4 - Get Fund Balance Ratios	
Governmental Funds	44%
Proprietary Funds	320%
Total	**62%**

It is important to note that Moody's rating system evaluates the entire government, meaning that the lower ratio of governmental funds should not affect the County's rating according to Moody's documentation. Additionally, fund balances are just one of many factors considered by Moody's and other rating agencies. Therefore, high fund balances alone do not guarantee an Aaa bond rating.

Finally, the bond rating analysis represents a snapshot of the most recent financial report (with an adjustment for planned use of fund balance by the County). The risk model developed for Jefferson simulates the general fund over a future ten-year period. Nonetheless, the analysis illustrates that the County's fund balances are currently in a strong position relative to the standards employed by both S&P and Moody's bond rating agencies.

To close this section, let's summarize:

- Neither S&P's nor Moody's ratios serve as perfect proxies for the metric evaluated in the GFOA analysis: while we assess the County's self-insurance capacity through its reserves, bond rating agencies focus on the ability to repay debt obligations.
- Nonetheless, the ratios and benchmarks established by these agencies offer valuable context, as both their metrics and the County's reserve levels derive from fund balances.
- Jefferson's fund balance levels are robust in comparison to rating agency benchmarks. When focusing on the general fund, both County's ***Available Fund Balance*** and ***Unassigned Fund Balance*** ratio surpass the threshold established for AAA ratings as defined by S&P's rating criteria. According to Moody's benchmarks, Jefferson's fund balance ratios satisfy Aaa standards for both county-wide funds and governmental funds.
- This analysis is a snapshot in time (the end of fiscal year 2024). Our risk model simulates the performance of the County reserves over a ten-year period. The next section puts together all the previous parts of this report to present the conclusions from the simulation.

Section 7 – Putting it All Together

In Sections 4 and 5 we examined individual risks such as recessions, storms, floods, and more. We examined each of these risks individually to best understand the nature of each risk. To arrive at a final reserve strategy for the County, we need to consider these risks as a group. Considering the risks as a group has important advantages.

The first advantage is that considering risks as a group recognizes the diversity in the risks that the County faces. This diversity is an advantage for County finances! Diversity in risks means we should not simply add together a reserve for each individual risk. This may overstate the amount of reserves that the County really needs. This is because it is unlikely that the County will experience, for example, a deep recession, a severe earthquake, and severe floods within a short time period.

The second advantage of considering all the risks together is that not all the risks have an equal chance of occurring over a given time period. Recessions are more common than a 1,000-year flood. The reserve analysis should reflect this fact. We can use relative chances of each of the major risks occurring over a ten-year period to build a model of risks over a long-term time horizon.

The final advantage of considering all the risks together is that we can consider "risk interdependencies." This simply means that the occurrence of one risk could impact the probability and/or magnitude of a related risk. In the County's case, a good example an interdependency is revenue performance and recessions. A recession has negative consequences for all revenues, even if those consequences are not the same. Other than that, there does not appear to be any critical interdependencies. It is not unusual for local governments GFOA has worked with to not have many interdependencies.

To realize the advantages described above, we built a model that considers the County's risks over a ten-year time horizon. The GFOA Risk Model runs ten thousand simulations of possible futures for the County. Below are the key assumptions behind the model. Some of these assumptions are user-definable so that the County can explore alternative scenarios to those described in the report.

- **Probability of an undesirable event.** The probability of any undesirable event occurring is consistent with the assumptions described in Section 5. For example, recessions happen at the same rate they have occurred since 1950. A 100-year flood occurs once every 100 years in the model.
- **Magnitude of an undesirable event.** Should a simulation show that an undesirable event occurs in any given year, the magnitude is generated randomly in a manner to how we described the risks earlier in this report. A recession uses the County's historical experience to generate plausible declines. Natural disasters use FEMA data that describes the experience of other county governments.
- **FEMA reimbursement.** As described in Section 5, the County could recoup some of its losses from extreme events, such as floods and storms, from reimbursements from FEMA.
- **The County does cut some spending to help offset the impact of a recession.** At least some of the losses from a recession could be absorbed by cutting back on the County's regular spending. The Risk Model provides the user with the ability to set the amount of spending the County is willing to cut. For the purposes of this report, the County staff defined several possible cost-cutting strategies, based on what the County considered when faced with the prospect of declining revenues during the COVID downturn. The cuts total about $5 million or 13% of the

County budget (assumed to be $41 million). The model assumes that all of these cuts would be activated in severe recession. However, the model also assumes that the County would absorb about $2 million worth of losses in its reserve, which means the County would not need the full menu of cuts in a mild recession.

- **The County will generate small, but consistent surpluses.** In the past, the County usually generated surpluses in years when there was not a recession. The model assumes most likely annual surplus of 0.25% in non-recession years. The model also includes the option to explore alternative surplus scenarios. For example, as of this writing there is some uncertainty about how state legislation could impact the County's labor costs. County staff believe that there could be a legislative outcome that makes it very difficult for the County to balance its budget in the next few years.
- **County's starting fund balance**. The fund balance is set to $24.6 million to start. As per conversations with County staff, this reflects the County's traditional way of calculating reserves. It also reflects a small "mini-reserve" the County has for snow removal. Since extreme winter weather is included in the risk model, we want to be sure the model also includes the "self-insurance" the County already has for this risk.

Before we get into the results, there is one more piece of context we should cover. Our risk model shows how much would be needed to address the risks ***and*** meet other expectations the County might be subject to, like bond rating agency expectations. Thus, the model takes bond rating agency expectations into account. We looked at two data points to get a sense of bond rating agency expectations. According to publicly available data from Moody's, they look for fund balances equal to 35% of revenues *across the government* a AAA credit. We extend that the general fund only for the purpose of this analysis.

Therefore, for the purposes of this report we will define a "**critical threshold**" for reserves which is the amount of reserves the County does not want to go below, ***while at the same time*** also having adequate confidence of handling all the risks described in this report. We will assume the critical threshold is 35% of revenue (AAA level). However, the model allows the user to define the critical threshold, so other thresholds can also be examined by the County.

We combined all the information described above to create a ten-year probabilistic model. The County's goal for this analysis was to find an amount that can give the County sufficient confidence that its reserves will be sufficient to cover the risks and stay above the critical threshold. We next present a series of graphics based on this model.

Exhibit 7.1 shows the average remaining reserve per year (blue line). It also includes a dashed red line, which is the "critical threshold" or the amount of money the County would prefer its reserves not go below. The critical threshold has been set equal to the amount of money Moody's associates with a AAA bond rating: fund balance equal to 35% of revenues.[20] There are a couple of important nuances the reader should be aware of:

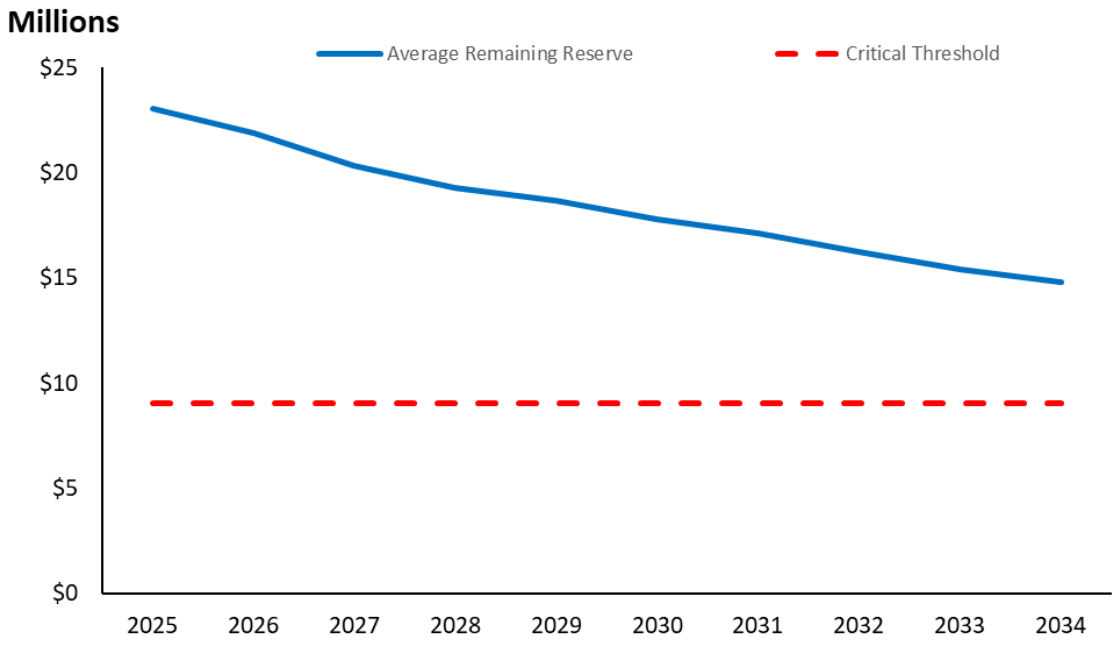
- Moody's considers fund balance ***across the entire government***. Our analysis is ***limited to the general fund***. Hence, we are assuming the general fund will need to carry "its fair share" of meeting the AAA

[20] Note that having this amount of fund balance does not guarantee a AAA rating. Several factors go into determining bond ratings.

standard or 35% of general fund revenues. This is not unreasonable as other rating agencies, like Standard and Poor's, do consider general fund in isolation.

- Moody's looks at ***available fund balance***. Our analysis is focused on ***reserves,*** or the portion of fund balance available for self-insurance. To compensate, we lowered the 35% target by an amount equal to what we considered to be (in consultation with County staff) a reasonable representation of reliably available additional fund balance outside of the County's reserves. For example, the County's fund balance includes amounts assigned for special projects that departments undertake. If a dire situation called for it, the County could and would redirect that money to making a debt payment. This is why Moody's looks at available fund balance and not just reserves. So, our analysis compensated for the presence of fund balance amounts outside of reserves – the amounts which Moody's would consider "available fund balance."

Exhibit 7.1 – Simulated Remaining Reserve Per Year (Constant Dollars)



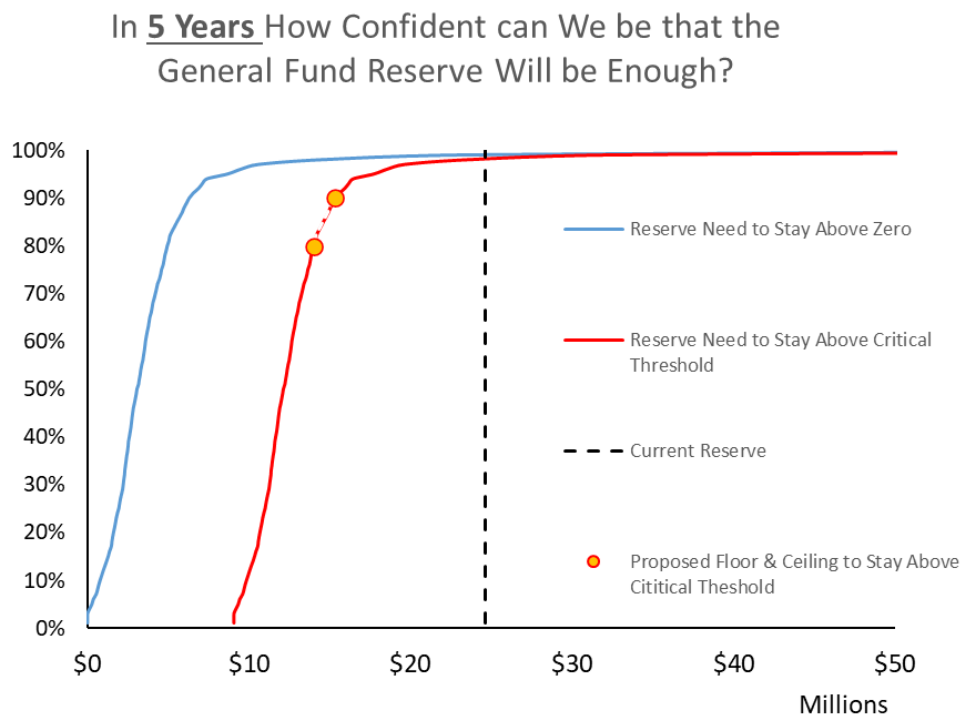
The Exhibit shows the County's reserves are simulated to drift downwards, on average, over the next ten years. However, we can see that it remains above the dotted red line, the critical threshold over the entire period. The County's willingness to take action in response to a recession is important for staying above the red line. The reason the line tends to drift downwards is two-fold:

- In consultation with County staff, we set a limit on how much of any surplus would go towards building back up the reserve. If the reserve gets above 25% of revenues it is assumed to be likely that the Board would direct the annual budget surplus to some other purpose that building up reserves.
- The County's future anticipated surpluses are modest, which means that in the case of larger losses the reserves would be built back up slowly.

Below is Exhibit 7.2. This is a cumulative probability chart. It shows the confidence available from varying levels of reserves over a ***five-year*** period. We limited ourselves to a five-year perspective for this graphic because five years because County staff considered five years to be a more realistic period over which to consider the County's reserves (and GFOA agrees that five years is perfectly reasonable). On the graph, we see that the County's existing reserve (the black dashed line) intersects the red line at a very high level of confidence - over 90%. The main take-away from this graphic is the reserves have a diminishing return at a certain point because the flatter the line gets, the less confidence an additional dollar of reserve "buys" you. This is because the further to the right you go on the graph, the more extreme the events are that must be covered by reserves. The County would not be well served by accumulating reserves past the point where the line starts to flatten out. The implication of the line going flat is that not all points on the line are equally cost effective. Let us examine Exhibit 7.2 to illustrate. Any point on the line that is on a flatter part of the curve is less cost effective than a point on a steeper part of the curve.

GFOA discussed the model with County staff, and the conclusion was that the County would be well-served by the target range shown on Exhibit 7.2. This equates to about $14 to $15 million and provides about 80% to 90% confidence in managing the risks the County faces ***and*** staying above the critical threshold (AAA-standard). This amounts to about 34% to 37% of the County's general fund annual expenditures. We can see the recommended range (bound by the orange dots on the red line) is less than the current reserve (the black dotted line).

Exhibit 7.2 – Cumulative Probability Chart



GFOA recommends the County establish a policy for a floor and a ceiling amount of reserves, as is shown in the Exhibit. The ceiling is an amount of reserves this County will try not to exceed and a floor is an amount that County will try not to go below and will try to replenish the reserves if they do go below the floor. GFOA cannot recommend a single dollar amount of reserves the County should maintain, but our analysis does provide a clear general direction in the form of reserve goal range, and our risk model provides the ability to "stress test" different reserve strategies. The reason we cannot make a precise recommendation is that a big part of determining a desirable reserve amount is the "risk appetite" of County officials. Officials who are risk averse may prefer more reserves. Those who are less averse and perhaps more sensitive to the opportunity costs of holding reserves may prefer less. The range accommodates different risk appetites while also providing solid assurances of staying above the critical threshold and avoiding the flat part of the curve in Exhibit 7.2. The table below summarizes what has been discussed.

CRITICAL THRESHOLD = Bond Rating: AAA or $9M		
A Reserve Policy typically expresses reserve targets as a percentage of expenditures or revenues. Below we have converted the dollar figures to a percent of Expenditures		
Dollars		Percent of Expenditures
$14.0 Million	80% confident of staying above critical threshold over five years	34%
$15.4 Million	90% confident of staying above critical threshold over five years	37%

Here are some other conclusions we can draw from the graphics presented on the previous pages:

- The County's ability to generate surpluses has an important impact on the chances that fund balance and reserves go below thresholds. Later in the report we recommend a "structurally balanced budget policy" to help the be sure the County continues to consistently generate balanced budgets, if not surpluses.
- If the County does generate surpluses, it must then choose to direct those surpluses towards building the reserves. A volatile revenue policy, discussed in the recommendations later, could help in this regard.
- The County should remain mindful of the potential for extreme consequence events. A large flood, tornado, or "nuclear verdict" on an insurance claim could cause extreme costs. In Exhibit 7.2 the reader will notice that the red line extends very far to the right. This tells us that there is a small chance of some very extreme outcomes, such as those described above.
- The County should remain mindful of risks like a resolution to Act 10 that results in substantially higher labor costs. This would make it harder for the County to generate surpluses. We worked with County staff to develop an alternative surplus scenario around Act 10 in order to see how the model would be impacted. We found that the same reserve dollar amounts shown in the table above would only provide 40% to about 60% confidence in staying above the critical threshold.

To complement the reserve analysis, we can offer several additional recommendations. GFOA has conducted extensive research into what it takes for local government to be financially sustainable. We call this body of work "Financial Foundations for Thriving Communities" (Financial Foundations). This research has shown that local governments require clear decision-making boundaries. Thus, many of our recommendations will address boundary setting via financial policies.

Update a Financial Policy. The County has done a great job in establishing a clear fund balance / working capital policy. The policy should be updated to reflect the findings of this report:

- Sections 5 and 7 describe the desired target for General Fund "working capital", which is the equivalent of what we have been calling reserves. We suggest replacing both of these sections with a range. This would establish a "floor" and "ceiling" on reserves. As we discussed earlier in this report,

a range equal to 37% to 34% of expenditures would give the County high confidence in covering its risk exposures and staying above the amount of fund balance associated with a AAA bond rating.

- The policy does a good job of describing what the County would do if there was too much or too little working capital. This appears in sections 7 and 10. These sections should be updated to reflect the new floor and ceiling.

Adopt a policy of objective forecasting and conservative budgeting. County staff expect it to be more difficult to generate surpluses in the years ahead, which will make it more challenging to stay within the desired floor and ceiling amounts. There are several budget policies and practices the County could adopt to support good public services while safeguarding its financial position at the same time via conservative budgeting and objective forecasting.

- **Volatile revenue policy.** The County already has a "one-time revenue policy" that prohibits non-recurring revenues from funding recurring costs.[21] Some revenues, like sales tax, are recurring, but they can go up and down substantially from year to year. A volatile revenue policy would treat extraordinarily high annual revenues from a volatile source as a one-time revenue. The bulk of the revenue income would be treated like a recurring revenue – it is just the extraordinary amount that would have more limited uses. This protects the County from using peak revenues to over-invest in programs that have to be supported for many years. This would serve to help the County maintain a stable, dependable set of on-going services over the long-term because it would help the County avoid over-expanding services beyond what is truly affordable. For example, a policy could state if in any given year sales taxes spike above their 5-year historical growth rate then the overage will be treated as temporary revenue. The County already does something like this, informally, as part of its budget preparation. It could be formalized as part of how the County ensures good governance over its resources.
- **Adopt a structurally balanced budget.** Counties are required to adopt a balanced budget by law. However, this just means financial sources must be equal to uses. So, for instance, a county building could be sold off (a non-recurring revenue) and the proceeds used to hire more sheriff deputies (a recurring expenditure). This would, of course, be a bad idea and would be prohibited the Jefferson County's existing revenue policy. A structurally balanced budget policy goes a step further by making this into a commitment to balance recurring revenues and recurring expenditures across the entire County budget and balancing its non-recurring revenues and expenditures, separately. This recommendation advocates a preventative posture but preventing structural deficits from occurring.
- **Adopt a phased schedule of spending on non-recurring expenditures and condition spending on forecasts being met**. As part of its budget, the County could adopt a prioritized list of one-time expenditures, in addition to its regular on-going expenditures. The total of the one-time and on-going expenditures would be equal to or less than the County's projected revenue. The one-time expenditures would then be made throughout the year, in priority order, and conditioned on revenues coming in as expected. If revenues underperform the County's forecasts, then the lower priority expenditures would not be made.
- **Affirmative reauthorization of spending.** The conventional approach to budgeting is that once a new service is authorized it is "baked in" to the budget and is funded year after year. This can lead to financial distress when new services are layered on top of old services. An alternative is to require affirmative reauthorization for a new service. This could be especially useful where a new service is intended to achieve some clear public policy goal. At the end of some set period, the

[21] The policy contains appropriate exceptions.

County Board could be required to explicitly reauthorize funding based on whether the program is achieving its stated goals. This also a good approach for grant funded services – should the County continue to fund a service after the grant ends? There are many ways to structure this kind of "affirmative reauthorization." For example, GFOA is has released a report on "target-based budgeting," which is form of budgeting that essentially "bakes in" the requirement of affirmative re-authorization to how departments build their budgets. Another example is a grants policy that requires grant-funded programs to be reviewed after the grant ends to decide if the City will continue to fund the program with its own money.

The County should adopt a mechanism to monitor its own compliance with a policy. GFOA's Financial Foundations research suggests that boundaries (e.g., financial policies) must be monitored in order to be fully effective.

The City of Tempe, Arizona provides a good example of how a reserve policy can be monitored. Tempe's policy is to maintain the general fund reserve equal to between 20% and 30% of general fund revenues. The general fund reserve policy is combined with Tempe's five-year financial forecast, where the goal is to keep reserves within the 20% to 30% boundary during the five-year forecast period. This approach originated in 2009 when Tempe had a policy to maintain reserves equal to 25% of general fund revenues. However, Tempe had been maintaining fund balances above 30%, which was causing some to question why Tempe was not in alignment with the policy and whether Tempe had a fund balance that was too large. The City Council and staff agreed to change the policy to set a goal for the reserves to be between 20% and 30% of revenues. This range would provide more discretion, but it would also create clear bounds for what Tempe would consider acceptable maximum and minimum reserves. Tempe regularly checks its long-term forecast against the policy goal to see if it is meeting the goal.

The County should consider continued investments in cybersecurity. Cybersecurity is a threat for local governments. Available data suggests several sobering points:

- Local governments are an attractive target for cybercriminals and ransomware attacks against local governments are common.
- The amount of damage from an attack appears to only be weakly correlated to the size of the government. Data suggests that the average attack costs around $100,000 but attacks can and have cost local governments many millions of dollars. Even though Jefferson County is not as large as many local governments that have made headlines for multi-million-dollar losses incurred by an attack, the County could still suffer a substantial loss – perhaps in excess of its policy limits.
- Cyber insurance policies can get expensive and hard to come by when insurance markets harden.

Given the points above, the County might consider the following recommendations that have implications for the County's reserves:

- Continue planning for enhanced security and making cost-effective investments in cybersecurity controls that both: A) reduce the likelihood of a successful attack; and B) reduce the potential damages if an attack succeeds. Because reserves are ultimately a form of self-insurance there could be a strong case for using some of the County's reserves to strengthen its cybersecurity. This is because a dollar invested in prevention is usually going to be more effective than a dollar

invested in remediation. Of course, similar rationale could be applied to any exposure where the potential exists to make effective preventative investments.

- INSERT DISCUSSION OF IMPORTANT RETAINED RISKS IN COUNTY CYBER INSURANCE POLICY
- The County can get more information about how to approach cyber insurance in the GFOA publication Cyber Risk Savvy.

GFOA's analysis has its limits. It is impossible for any risk analysis to be completely comprehensive of all considerations facing the County. Appendix 1 to this report lists the important limitations of this analysis.

Appendix 1 – Limitations of GFOA's Analysis

This section highlights the most important limitations of our analysis.

Our analysis is not predictive. GFOA does not forecast future recessions, natural disasters, or other extreme events. Rather, our model generates hundreds or even thousands of different scenarios to show how the future could unfold. This helps the County think more broadly about risk so that it can be better prepared for whatever future event does eventually come to pass. Finally, it is important to note that low probability events are still possible events. Hence, even if our model says an event has a low probability, then that does not mean it will not occur.

GFOA is not a risk management consultant. We worked with the County to find out which risks the County believes are most salient and then modeled those risks quantitatively to judge the potential financial impact. We are not risk managers and it is not our role to tell the County which risks it should be more concerned or less concerned about or what the best way is to manage those risks.

Our analysis is based on historical records. Historical data is often a good way to model potential future outcomes. However, historical data may not be perfect. For example, global climate change could increase the County's vulnerability to naturally occurring extreme events.[22] This means that historical data could underestimate the likelihood and/or severity of extreme events in the future. Unfortunately, no one can say precisely what the impact of climate change will be. Hence, GFOA cannot speculate if an upward adjustment to the reserves is necessary and, if so, by how much. However, this does mean that there could be a case for reserving a higher amount than the efficient range described in our report (or pursuing other risk management strategies).

Our analysis is not inclusive of every risk the County could possibly face. We examined the County's past history and worked with County staff to identify the risks that posed the most clear and present danger to the County. However, it is possible that the County could experience a shock that no one was expecting. Hence, there is a case for reserving more than our analysis suggests is efficient. This could provide

[22] According to the Fourth National Climate Assessment created by the U.S. Global Change Research Program (USGCRP) and released in November 2018: "more frequent and extreme weather and climate-related events, as well as changes in average climate conditions, are expected to continue to damage infrastructure, ecosystems, and social systems." The report cites climate-related risks to communities "from adverse weather and climate related events such as extreme storms or wildfires." https://nca2018.globalchange.gov/chapter/1/.

additional protection against risks that no one can foresee. The model does include an "unknown unknown" component, but this part of the model is grounded in historical experiences (see prior paragraph). So, while the model does make some accommodation for the unknown, by definition, this accommodation of the unknown will be rough and may be quite different from how the future unfolds.

Our model is a simplification of reality. It has been said that "all models are wrong, some are useful." This means that no model is a perfect depiction of reality. Many simplifying assumptions are made. Nevertheless, models can provide insights into real-word situations to help you make better decisions. That said, no model, including ours, captures every detail involved in real-world risks.

Our model is focused on general fund reserves as a risk mitigation tool. Other mitigation tools, such as insurance, can provide additional resources to respond to an extreme event. We did not judge the adequacy of the County's insurance program.

Good decisions do not always lead to good outcomes. Excel simulation tools can enhances one's perception and understanding of uncertainty and risk.[23] However, when dealing with uncertainty, even the best decision may not lead to a good outcome, if luck goes against you.[24] To illustrate, imagine an insurance company was willing to sell the County an insurance policy against being hit by a meteor for $50 million. A meteor strike is an extremely remote risk, so spending $50 million on an insurance policy would not be a wise decision. Imagine The County does then get hit by a meteor that causes $100 million in damage. Should you criticize the decision not to buy insurance? No, because the decision was reasonable given the information available at the time and there was no way to predict a meteor hitting the County. Similarly, our model may show that a given amount of reserves is reasonable under most conditions, but The County could encounter a confluence of undesirable events that the reserves are insufficient to address.

[23] To survive in an increasingly unpredictable world, we need to train our brains to embrace uncertainty, Emre Soyer, Quartz Magazine, January 9, 2017 https://qz.com/879162/to-survive-in-an-increasingly-unpredictable-world-we-need-to-train-our-brains-to-embrace-uncertainty/.

[24] This is one of the primary lessons in: Annie Duke. *Thinking in Bets: Making Smarter Decisions When You Don't Have All the Facts*. Portfolio. 2019.