SOUTH METRO FIRE DEPARTMENT
1650 Humboldt Avenue • West St. Paul MN 55118
Phone: (651) 552-4176 • FAX: (651) 552-4195
www.southmetrofire.com

AMENDED AGENDA
BOARD OF DIRECTORS MEETING

Meeting Date: December 20, 2023, at 4:30 PM
Meeting Place: South St. Paul, Training Room

I. Roll Call
Board Members: Berry, Francis, Napier, Seaberg, Wippermann

II. Adopt Agenda

III. Communications/Recognitions

IV. Consent Agenda
a. November 15, 2023, Meeting Minutes
b. November 2023 List of Claims
c. November 2023 Bank Reconciliation
d. November 2023 Month End Budget Report
e. November 2023 Run Summary Report
f. Resolution 2023-06 Approving Services Agreement
g. Resolution 2023-07 Approving Liability Coverage Limits
h. Resolution 2023-08 Adopting Fee Schedule
i. Resolution 2023-09 Accepting Proceeds from the EMS Tax Levy

V. Committee Reports
a. None

VI. Agenda Items
a. Supplemental Cancer Policy Presentation
b. Standards of Cover Study Discussion
c. Property & Casualty Insurance Renewal
d. 2023 Budget Approval
e. Labor Negotiations

i. *Closed Session*
1. *Motion to hold closed meeting pursuant to Minn. Stat. 13D.03 to review labor negotiation proposals*
2. *Motion to re-open meeting*

f. Fire Chief Performance Evaluation

i. Closed Session
1. Motion to close pursuant to Minn. Stat. 13D.05 subd. 3 to conduct the performance evaluation of Fire Chief Mark Juelfs, unless he so requests that the meeting be open.
2. Motion to re-open meeting

VII. Public Comment

VIII. Adjourn

Next Regular Meeting – January 18, 2023, West St. Paul

MINUTES

SOUTH METRO FIRE DEPARTMENT BOARD OF DIRECTORS

Wednesday, November 15, 2023

South St Paul Training Room

Members Present: James Francis, Tom Seaberg, Dennis Wippermann, Dave Napier

Also Present: Mark Juelfs, Clara Hilger, Deb Wheeler, M Nelson, S Kutney, P Fletcher, S Jansen, S Eckmann, J Thompson, J Bessermin, A Dahlinger, S Seal, T Johnson, G Lillvis, J Nelson, E Langer, L Chinander, M Asp, R Garcia

The meeting was called to order at 4:30 p.m.

ADOPT AGENDA

Motion was made to adopt the Agenda by Wippermann; seconded by Francis
Motion carried.

COMMUNICATIONS/RECOGNITIONS

Introductions of Firefighters
Firefighters Langer, Asp and Chinander introduced themselves and the Board welcomed them.
The department received thank you cards from Jerome Brandel and State Farm

CONSENT AGENDA

Motion was made to approve the Consent Agenda by Wippermann; seconded by Seaberg.
Motion carried.

COMMITTEE REPORTS

None

AGENDA ITEMS

Standards of Coverage Study
A representative from Citygate Associates presented the Assessment to the Board. The study included 15 findings and 5 actionable recommendations. The Department's deployment system is stressed in three key areas: Dispatch processing and travel time, the rising rate of emergency medical incidents and the travel time coverage limitations with the two current stations. It is recommended to maintain the two-station model until the recommended 5 minute first-unit travel time measure cannot be met, then a third station should be considered. It was also recommended, as funding allows, that the department increase minimum daily staffing from 8 to 12 plus a Battalion Chief on each shift.
Board member Seaberg would like a page added to the study that indicates if the department were to have a single station that that would not mean the department would be lowering the number of FTE's.

Chief Juelfs asked the Board if he could apply for the Safer Grant and stated that if we were awarded the grant we would not have to accept it. The Board agreed to have Chief Juelfs apply.

Health Insurance Renewal
The department continues to offer two plans, an H.S.A plan and the traditional co-pay plan. The increase to the HealthPartners plan is approximately 10%. Chief Juelfs asked the Board if they would be willing to pay for the entire increase to family coverage since it would still be under the budgeted amount. The Board agreed that they would like to continue to keep the increase split 50/50. Board member Francis would like Chief Juelfs to look into a cancer insurance program that would be employer paid. Chief Juelfs will get information on cost and bring that to the December meeting. The Board agreed to raise the H.S.A contribution for singles and families by 100.00 annually and to continue to pay the single premium for dental insurance.

Motion was made to authorize staff to make payments in accordance with the premium renewals as outlined for health insurance, dental insurance, life insurance and long-term disability insurance and voluntary vision care plans by Francis; seconded by Napier.
Motion carried.

Public Board Member Process
The current two-year term for Board Member Wippermann will expire on March 31, 2024.

Motion was made to post the opening for two months and continue with the current process by Francis; seconded by Seaberg.
Motion carried.

Labor Negotiations
Closed Session
Motion to hold closed meeting pursuant to Minn. Stat. 13D.03 to review labor negotiation proposals by Francis; seconded by Seaberg.
Motion carried.

Motion to re-open meeting by Seaberg; seconded by Wippermann.
Motion carried.

PUBLIC COMMENT

None

MOTION TO ADJOURN

Motion to adjourn by Seaberg; seconded by Wippermann.
Motion carried.

The next regular meeting is scheduled on December 20th at 4:30 pm in South St. Paul

Respectfully submitted by:

Deb Wheeler

SOUTH METRO FIRE

Summary of List of Claims
Board Meeting of December 20, 2023

PAYROLL CHECK REGISTER:

Payroll Period	10/30 - 11/12		
Date Paid	11/17/2023		
Direct Deposit		$	119,089.89
Payroll Period	11/13 - 11/26		
Date Paid	12/1/2023	$	118,106.41
Direct Deposit			
Payroll Period	11/27 - 12/10		
Date Paid	12/15/2023	$	120,484.32
Direct Deposit			
TOTAL NET PAYROLL		$	357,680.62

DISBURSEMENT CHECK REGISTER:

Checks	11106 - 11138	$	52,733.56
EFTS	2713 - 2737	$	234,127.97
TOTAL DISBURSEMENT CHECKS			$286,861.53

TOTAL PAYROLL, DISBURSEMENTS, ACH'S $644,542.15

S. METRO FIRE

Payment Register

From Payment Date: 11/17/2023 - To Payment Date: 12/14/2023

Number	Date	Status	Void Reason	Reconciled/ Voided Date	Source	Payee Name	Transaction Amount	Reconciled Amount	Difference
1-ANCHOR BAN - ANCHOR BANK									
Check									
11106	11/17/2023	Reconciled		11/30/2023	Accounts Payable	APPELHOLM/ANGELINE	$122.00	$122.00	$0.00
11107	11/17/2023	Reconciled		11/30/2023	Accounts Payable	ASPEN MILLS	$164.75	$164.75	$0.00
11108	11/17/2023	Reconciled		11/30/2023	Accounts Payable	BATTERIES PLUS	$17.24	$17.24	$0.00
11109	11/17/2023	Reconciled		11/30/2023	Accounts Payable	Citygate Associates, LLC	$11,116.84	$11,116.84	$0.00
11110	11/17/2023	Reconciled		11/30/2023	Accounts Payable	CONGDON/TIM	$76.97	$76.97	$0.00
11111	11/17/2023	Reconciled		11/30/2023	Accounts Payable	Conley/Robert	$570.75	$570.75	$0.00
11112	11/17/2023	Reconciled		11/30/2023	Accounts Payable	Francis, James	$100.00	$100.00	$0.00
11113	11/17/2023	Reconciled		11/30/2023	Accounts Payable	Further	$119.10	$119.10	$0.00
11114	11/17/2023	Reconciled		11/30/2023	Accounts Payable	GALLS, LLC	$471.80	$471.80	$0.00
11115	11/17/2023	Open			Accounts Payable	LEAGUE OF MN CITIES INS. TRUST	$1,053.88		
11116	11/17/2023	Reconciled		11/30/2023	Accounts Payable	Linde Gas and Equipment	$138.53	$138.53	$0.00
11117	11/17/2023	Reconciled		11/30/2023	Accounts Payable	LOCAL GOVERNMENT INFORMATION	$963.00	$963.00	$0.00
11118	11/17/2023	Reconciled		11/30/2023	Accounts Payable	MacQueen Emergency Group	$10,067.40	$10,067.40	$0.00
11119	11/17/2023	Open			Accounts Payable	Napier/ David	$100.00		
11120	11/17/2023	Reconciled		11/30/2023	Accounts Payable	OXYGEN SERVICE COMPANY	$73.20	$73.20	$0.00
11121	11/17/2023	Reconciled		11/30/2023	Accounts Payable	Seaberg, Thomas	$100.00	$100.00	$0.00
11122	11/17/2023	Open			Accounts Payable	Smith/ Robert	$50.00		
11123	11/17/2023	Reconciled		11/30/2023	Accounts Payable	US Bank Equipment Finance	$117.00	$117.00	$0.00
11124	11/17/2023	Open			Accounts Payable	Wheeler, Deb	$72.00		
11125	11/17/2023	Open			Accounts Payable	WIPPERMANN/DENNIS	$100.00		
11126	11/30/2023	Open			Accounts Payable	ASPEN MILLS	$302.16		
11127	11/30/2023	Open			Accounts Payable	AT&T MOBILITY	$991.00		
11128	11/30/2023	Open			Accounts Payable	CARDMEMBER SERVICES	$15,846.17		
11129	11/30/2023	Open			Accounts Payable	EMERGENCY APPARATUS MAINTENANC	$889.49		
11130	11/30/2023	Open			Accounts Payable	GALLS, LLC	$77.40		
11131	11/30/2023	Open			Accounts Payable	INT'L ASSN FIREFIGHTERS 1059	$263.10		
11132	11/30/2023	Open			Accounts Payable	INT'L ASSN FIREFIGHTERS 724	$1,504.80		
11133	11/30/2023	Open			Accounts Payable	Jefferson Fire & Safety, Inc	$556.05		
11134	11/30/2023	Open			Accounts Payable	MN STATE FIRE CHIEFS ASSN	$280.00		
11135	11/30/2023	Open			Accounts Payable	NAPA	$3.32		
11136	11/30/2023	Open			Accounts Payable	NARDINI	$805.00		
11137	11/30/2023	Open			Accounts Payable	NINTH BRAIN	$118.74		

Payment Register

From Payment Date: 11/17/2023 - To Payment Date: 12/14/2023

Number	Date	Status	Void Reason	Reconciled/ Voided Date	Source	Payee Name	Transaction Amount	Reconciled Amount	Difference
11138	11/30/2023	Open			Accounts Payable	S ST PAUL/CITY OF	$5,501.87		
Type Check Totals:					33 Transactions		$52,733.56	$24,218.58	$0.00

1-ANCHOR BAN - ANCHOR BANK Totals

Checks	Status	Count	Transaction Amount	Reconciled Amount
	Open	18	$28,514.98	$0.00
	Reconciled	15	$24,218.58	$24,218.58
	Voided	0	$0.00	$0.00
	Stopped	0	$0.00	$0.00
	Total	33	$52,733.56	$24,218.58

All	Status	Count	Transaction Amount	Reconciled Amount
	Open	18	$28,514.98	$0.00
	Reconciled	15	$24,218.58	$24,218.58
	Voided	0	$0.00	$0.00
	Stopped	0	$0.00	$0.00
	Total	33	$52,733.56	$24,218.58

Grand Totals:

Checks	Status	Count	Transaction Amount	Reconciled Amount
	Open	**18**	**$28,514.98**	**$0.00**
	Reconciled	**15**	**$24,218.58**	**$24,218.58**
	Voided	**0**	**$0.00**	**$0.00**
	Stopped	**0**	**$0.00**	**$0.00**
	Total	**33**	**$52,733.56**	**$24,218.58**

All	Status	Count	Transaction Amount	Reconciled Amount
	Open	**18**	**$28,514.98**	**$0.00**
	Reconciled	**15**	**$24,218.58**	**$24,218.58**
	Voided	**0**	**$0.00**	**$0.00**
	Stopped	**0**	**$0.00**	**$0.00**
	Total	**33**	**$52,733.56**	**$24,218.58**

S. METRO FIRE

Payment Register

From Payment Date: 11/9/2023 - To Payment Date: 12/14/2023

Number	Date	Status	Void Reason	Reconciled/ Voided Date	Source	Payee Name	Transaction Amount	Reconciled Amount	Difference
1-ANCHOR BAN - ANCHOR BANK									
EFT									
2713	11/09/2023	Reconciled		11/30/2023	Accounts Payable	NATIONWIDE	$2,680.00	$2,680.00	$0.00
2714	11/29/2023	Reconciled		11/30/2023	Accounts Payable	I C M A RETIREMENT CORP	$2,225.00	$2,225.00	$0.00
2715	11/29/2023	Reconciled		11/30/2023	Accounts Payable	IRS - PR TAXES	$23,897.00	$23,897.00	$0.00
2716	11/29/2023	Reconciled		11/30/2023	Accounts Payable	MN CHILD SUPPORT	$355.79	$355.79	$0.00
2717	11/29/2023	Reconciled		11/30/2023	Accounts Payable	MN DEPT OF REVENUE	$7,783.65	$7,783.65	$0.00
2718	11/29/2023	Reconciled		11/30/2023	Accounts Payable	MN II LIFE -- HSA	$1,261.18	$1,261.18	$0.00
2719	11/29/2023	Reconciled		11/30/2023	Accounts Payable	MSRS	$450.00	$450.00	$0.00
2720	11/29/2023	Reconciled		11/30/2023	Accounts Payable	MSRS - HCSP	$2,638.82	$2,638.82	$0.00
2721	11/29/2023	Reconciled		11/30/2023	Accounts Payable	NATIONWIDE	$2,680.00	$2,680.00	$0.00
2722	11/29/2023	Reconciled		11/30/2023	Accounts Payable	PUBLIC EMPLOYEES RETIRE ASSN	$54,083.99	$54,083.99	$0.00
2723	11/29/2023	Reconciled		11/30/2023	Accounts Payable	Further	$1,042.59	$1,042.59	$0.00
2724	11/29/2023	Reconciled		11/30/2023	Accounts Payable	Further	$33.00	$33.00	$0.00
2725	11/29/2023	Reconciled		11/30/2023	Accounts Payable	CLOVER	$5.35	$5.35	$0.00
2726	12/05/2023	Open			Accounts Payable	I C M A RETIREMENT CORP	$2,225.00		
2727	12/05/2023	Open			Accounts Payable	IRS - PR TAXES	$23,357.97		
2728	12/05/2023	Open			Accounts Payable	MN CHILD SUPPORT	$355.79		
2729	12/05/2023	Open			Accounts Payable	MN DEPT OF REVENUE	$7,624.71		
2730	12/05/2023	Open			Accounts Payable	MN II LIFE -- HSA	$1,261.18		
2731	12/05/2023	Open			Accounts Payable	MSRS	$450.00		
2732	12/05/2023	Open			Accounts Payable	MSRS - HCSP	$2,579.58		
2733	12/05/2023	Open			Accounts Payable	NATIONWIDE	$2,680.00		
2734	12/05/2023	Open			Accounts Payable	PUBLIC EMPLOYEES RETIRE ASSN	$53,285.84		
2735	12/05/2023	Open			Accounts Payable	HEALTHPARTNERS	$40,939.49		
2736	12/05/2023	Open			Accounts Payable	Further	$208.33		

Payment Register

From Payment Date: 11/9/2023 - To Payment Date: 12/14/2023

Number	Date	Status	Void Reason	Reconciled/ Voided Date	Source	Payee Name	Transaction Amount	Reconciled Amount	Difference
2737	12/05/2023	Open			Accounts Payable	HIGHER STANDARDS	$23.71		
Type EFT Totals:					25 Transactions		$234,127.97	$99,136.37	$0.00
1-ANCHOR BAN - ANCHOR BANK Totals									

EFTs	Status	Count	Transaction Amount	Reconciled Amount
	Open	12	$134,991.60	$0.00
	Reconciled	13	$99,136.37	$99,136.37
	Voided	0	$0.00	$0.00
	Total	25	$234,127.97	$99,136.37

All	Status	Count	Transaction Amount	Reconciled Amount
	Open	12	$134,991.60	$0.00
	Reconciled	13	$99,136.37	$99,136.37
	Voided	0	$0.00	$0.00
	Stopped	0	$0.00	$0.00
	Total	25	$234,127.97	$99,136.37

Grand Totals:

EFTs	Status	Count	Transaction Amount	Reconciled Amount
	Open	**12**	**$134,991.60**	**$0.00**
	Reconciled	**13**	**$99,136.37**	**$99,136.37**
	Voided	**0**	**$0.00**	**$0.00**
	Total	**25**	**$234,127.97**	**$99,136.37**

All	Status	Count	Transaction Amount	Reconciled Amount
	Open	**12**	**$134,991.60**	**$0.00**
	Reconciled	**13**	**$99,136.37**	**$99,136.37**
	Voided	**0**	**$0.00**	**$0.00**
	Stopped	**0**	**$0.00**	**$0.00**
	Total	**25**	**$234,127.97**	**$99,136.37**

South Metro Fire Department
BANK RECONCILIATION
November 30, 2023

Old National Bank		
Ending Balance - Checking	**$**	1,983,399.00
Outstanding Disbursement Checks		(30,631.73)
DIT		
Adjustments:		
RECONCILED BALANCE	**$**	**1,952,767.27**

CITY TREASURER'S BALANCE:		
Previous Month's Reconciled Balance	**$**	1,237,607.49
Daily Receipts Posted		772,577.90
Disbursement Checks Issued		(303,689.10)
Payroll Checks and Direct Deposits		(239,030.15)
Rev Prior Month Adj:		
Dakota County Property Taxes		485,511.58
Merchant Credit Card Fees		(70.96)
Bank Service Fees		(139.39)
Deposit Recording Error		(0.10)
RECONCILED BALANCE	**$**	**1,952,767.27**

CASH ACCOUNT BALANCE:	**$**	1,467,466.14
Adjustments		
Dakota County Property Taxes		485,511.58
Merchant Credit Card Fees		(70.96)
Bank Service Fees		(139.39)
Deposit Recording Error		(0.10)
RECONCILED BALANCE	**$**	**1,952,767.27**

Cash by Fund:

		Beginning Balance	Net Activity	Ending Balance
General Fund	101-10101	552,057.60	221,291.04	773,348.64
Grant Fund	201-10100	899.44	-	899.44
Fire Assistance Fund			-	
Debt Service Fund	301-10101	(124.16)	-	(124.16)
Capital Fund	401-10101	684,774.61	8,567.61	693,342.22
	Total	1,237,607.49	229,858.65	1,467,466.14

Account Classification	Adopted Budget	Current Month Transactions	YTD Transactions	YTD Balance	% used/ Rec'd	Prior Year YTD Balance
Fund **101 - General Fund**						
REVENUE						
Taxes	1,209,952.00	.00	701,266.95	508,685.05	58%	334,043.83
Intergovernmental Revenues	280,612.00	.00	290,463.73	(9,851.73)	104%	(33,233.52)
Charges for Services	5,962,128.00	656,844.50	5,777,368.74	184,759.26	97%	66,402.42
Other Revenue	55,000.00	.00	24,889.96	30,110.04	45%	50,480.56
Other Financing Sources	.00	.00	.00	.00	+++	.00
REVENUE TOTALS	$7,507,692.00	$656,844.50	$6,793,989.38	$713,702.62	90%	$417,693.29
EXPENSE						
Personal Services	6,660,207.00	474,321.02	5,737,123.95	923,083.05	86%	678,415.65
Supplies	186,115.00	5,791.85	165,593.02	20,521.98	89%	43,228.87
Contractual Services	426,228.00	710.06	326,819.25	99,408.75	77%	72,900.32
Other Charges	235,142.00	1,531.74	245,494.53	(10,352.53)	104%	19,263.54
Capital Outlay	.00	.00	.00	.00	+++	.00
Debt Service	.00	.00	.00	.00	+++	.00
Other Financing Uses	.00	.00	100,901.35	(100,901.35)	+++	(302,274.00)
EXPENSE TOTALS	$7,507,692.00	482,354.67	6,575,932.10	$931,759.90	88%	$511,534.38
Fund **101 - General Fund** Totals						
REVENUE TOTALS	7,507,692.00	656,844.50	6,793,989.38	713,702.62	90%	417,693.29
EXPENSE TOTALS	7,507,692.00	482,354.67	6,575,932.10	931,759.90	88%	511,534.38
Fund **101 - General Fund** Totals	$0.00	$174,489.83	$218,057.28	($218,057.28)		($93,841.09)
Fund **201 - Grant Fund**						
REVENUE						
Intergovernmental Revenues	.00	.00	.00	.00	0%	.00
REVENUE TOTALS	$0.00	$0.00	$0.00	$0.00	+++	$0.00
EXPENSE						
Contractual Services	.00	.00	.00	.00	+++	.00
EXPENSE TOTALS	$0.00	$0.00	$0.00	$0.00	+++	$0.00
Fund **301 - Debt Service**						
REVENUE						
Intergovernmental Revenues	182,450.00	.00	91,225.00	91,225.00	50%	137,287.50
REVENUE TOTALS	$182,450.00	.00	91,225.00	$91,225.00	+++	$137,287.50
EXPENSE						
Contractual Services	182,450.00	.00	91,225.00	91,225.00	+++	183,050.00
EXPENSE TOTALS	$182,450.00	.00	91.225.00	$91.225.00	+++	$183.050.00
Fund 301 - Debt Totals						
REVENUE TOTALS	182,450.00	.00	91.225.00	91.225.00	+++	137.287.50
EXPENSE TOTALS	182,450.00	.00	91,225.00	91,225.00	+++	183,050.00
Fund 301 - Debt Totals	$182,450.00	$0.00	$0.00	$0.00		($45.762.50)
Fund **401 - Capital Projects**						
REVENUE						
Intergovernmental Revenues	.00	.00	.00	.00	0%	.00
Charges for Services	187,236.00	23,404.50	187,236.00	.00	100%	.00
Other Revenue	.00	.00	.00	.00	+++	.00
Other Financing Sources	.00	.00	.00	(100,901.85)	+++	(302,274.00)
REVENUE TOTALS	$187,236.00	$23,404.50	$187,236.00	($100,901.85)		($302,274.00)
EXPENSE						
Motor Vehicles	77,057.00	.00	1,432,839.96	(1,355,782.96)	1859%	(54,974.69)
Office Equipment	83,644.00	2,151.00	65,813.64	17,830.36	79%	23,929.34
Other Equipment	142,439.00	10,067.40	75,975.32	66,463.68	53%	6,185.18
EXPENSE TOTALS	$303,140.00	$12,218.40	$1,574,628.92	($1,271,488.92)	519%	($24,860.17)
Fund **401 - Capital Projects**						
REVENUE TOTALS	187,236.00	23,404.50	288,137.35	(100,901.35)	154%	(302,274.00)
EXPENSE TOTALS	303,140.00	12,218.40	1,574,628.92	(1,271,488.92)	519%	(24,860.17)
Fund **401 - Capital Projects**	($115,904.00)	$11,186.10	($1,286,491.57)	$1,170,587.57		($277,413.83)
Grand Totals						
REVENUE TOTALS	7,877,378.00	18,567,593.00	7,173,351.73	704,026.27	91%	252,706.79
EXPENSE TOTALS	7,993,282.00	494,573.07	8,241,786.02	(248,504.02)	103%	724,694.21
Grand Totals	($115,904.00)	$18,073,019.93	($1,068,434.29)	$952,530.29		($471,987.42)

2023 Run Summary

South Metro Fire Department

	January	February	March	April	May	June	July	August	September	October	November	December	YTD TOTAL	2022 YTD TOTAL
FIRE INCIDENTS														
111 Building fire	1	1	1	3	9	2	3	3	2	3	6		34	33
112 Fire in structure other than in a building													0	
113 Cooking fire, confined to container						1				1	1		3	7
114 Chimney fire													0	
116 Fuel													0	2
118 Trash		1		1	1								3	6
121 Fire in mobile home used as fixed residence									1				1	
130 Mobile property (vehicle) fire, other				2					1				3	2
131 Passenger vehicle fire					1		3	1	3		2		10	17
132 Road Freight or transport vehicle fire				1	1								2	4
133 Rail vehicle fire													0	
134 Water vehicle fire			1										1	
135 Aircraft Fire													0	
138 Off-road vehicle or heavy equipment fire					1								1	
142 Brush or bursh & grass mixture fire						2	2	1	1				6	5
143 Grass Fire				2									2	3
151 Outside rubbish fire							2		3	1			6	5
154 Dumpster fire					3	1	3	1	1				9	5
163 Outside equipment fire				2	3		2						7	1
	1	**2**	**2**	**11**	**19**	**6**	**15**	**6**	**12**	**5**	**9**	**0**	**88**	90
OVERPRESSURE RUPTURE, EXPLOSION, OVERHEAT (NO FIRE)														
200 Overpressure rupture, explosion, overheat other							1						1	
243 Fireworks explosion (no fire)													0	2
251 Excesive heat, scorch burns with no ignition	7	4	10	5	4	7	3	4	5	7	4		60	39
	7	**4**	**10**	**5**	**4**	**7**	**4**	**4**	**5**	**7**	**4**	**0**	**61**	41
RESCUE & EMERGENCY MEDICAL SERVICE														
311 Medical assist, assist EMS crew							1						1	4
321 EMS call, excluding vehicle accident with injury	449	425	501	492	471	424	488	461	442	492	519		5164	5122
322 Motor vehicle accident with injuries	5	6	14	7	9	9	7	11	9	7	4		88	84
323 Motor vehicle/pedestrian accident (MV Ped)					1	2					1		4	7
324 Motor vehicle accident with no injuries.	3	4	1	2	2	4	3	4	5	4	5		37	41
341 Search for person on land													0	1
350 Extrication, rescue, other		1					1						2	
352 Extrication of victims from vehicle													0	
353 Removal of victim(s) from stalled elevator	1		3		1	2	2	1			1		11	9
355 Confined Space Rescue													0	
357 Extrication of victim(s) from machinery													0	1
360 Water & ice related rescue, other													0	
361 Swimming/recreational water areas rescue													0	
362 Ice Rescue													0	
365 Watercraft rescue													0	6
372 Trapped by power lines0													0	
381 Rescue or EMS standby							1	1		3			5	
	458	**436**	**519**	**501**	**484**	**441**	**503**	**478**	**456**	**506**	**530**	**0**	**5312**	5275
HAZARDOUS CONDITION (NO FIRE)														
400 Hazardous condition, other					1	1							2	1
411 Gasoline or other flammable liquid spill			1		1		1	1	1				5	5
412 Gas leak (natural gas or LPG)	2	1	3	5	4	4	2	5	5	1	3		35	28
413 Oil spill											1		1	1
421 Chemical hazard (no spill or leak)			1										1	4
422 Chemical spill or leak				1			2		1	1			5	5
424 Carbon monoxide incident	3	2		1	1	2	3		1				13	24
440 Electrical equipment problem		1	1		3			2		1			8	13
442 Overheated motor	2	1	2	1			1	2	1	2	2			
444 Power line down	5	1	4	25		2	4	3		4			48	33
445 Arch, shorted electrical equipment	1	1	1	13		5	6	3	3	2			35	11
460 Potential accident	1												1	
461 Building or structure weakened or collapsed				1									1	
462 Aircraft standby													0	
463 Vehicle accident, cleanup		1											1	1
471 Explosive, bomb removal													0	
481 Attempt to burn								1					1	
	14	**8**	**13**	**47**	**10**	**14**	**19**	**17**	**12**	**11**	**6**	**0**	**171**	**328**
SERVICE CALL														
500 Service Call, other													0	4
510 Person in distress, other	1	1	1						1				4	5
519 Person in distress													0	
520 Water problem, other					1								1	
522 Water or steam leak			1				1			1			3	6
531 Smoke or odor removal	2	1						2			2		7	8
551 Assist police or other governmental agency	3	6	3	18		15	19	6	12	18	13		113	117
553 Public service		12	6	3	14	1	5	3	2	3	1		50	82
554 Assist invalid	32	41	45	31	37	41	31	32	38	39	61		428	404
561 Unauthorized burning				6	5	8	8	8	6	7	7		55	34
	38	**61**	**56**	**58**	**57**	**65**	**64**	**51**	**59**	**68**	**84**	**0**	**661**	660

2023 Run Summary

South Metro Fire Department

	January	February	March	April	May	June	July	August	September	October	November	December	YTD TOTAL	2022 YTD TOTAL
GOOD INTENT CALL														
600 Good intent call, other	1	2	1	1	1	3		7	3	2	2		23	11
611 Dispatched & canceled en route	9	7	13	16	21	29	25	23	24	17	11		195	180
621 Wrong location				1									1	1
622 No incident found on arrival at dispatch address	11	1	10	8	9	11	4	10	3	12	5		84	66
631 Authorized controlled burning			1		2	1		2	1	2			9	26
650 Steam, gas, other mistaken for smoke													0	
651 Smoke scare, odor of smoke	6	5	7	1	2	1	2	1	1	2			28	35
652 Steam, vapor, fog or dust thought to be smoke		1											1	3
653 Smoke from barbeque, tar kettle								1					1	2
661 EMS call, party transported by non-fire agency (661)											1		1	
671 HazMat release investigation w/no HazMat	3	1	6	3		3	1	9	1	1	2		30	27
	30	**17**	**38**	**30**	**35**	**48**	**32**	**53**	**33**	**36**	**21**	**0**	**373**	351
FALSE ALARM & FALSE CALL														
700 False alarm or false call, other	1								2				3	3
710 Malicious false call		2						1					3	13
714 Central Station, malicious false alarm	2							2					4	11
715 Local alarm system, malicious false call	9	1		2	2			1	1				16	18
721 Bomb scare - no bomb													0	
730 System malfunction, other				1									1	3
731 Sprinkler activation due to malfunction		1		3					4		2		10	10
732 Extinguishment system activation malfunction													0	
733 Smoke detector activation due to malfunction			2	1	13	3	3	6	7	2	4		41	35
735 Alarm system sounded due to malfunction	3	3	7	2	2	5	4	8	7	7	3		51	28
736 CO detector activation due to malfunction			3	2		3					1		9	18
740 Unintentional transmission of alarm, other							1						1	5
741 Sprinkler activation, no fire - unintentional	2					1							3	9
743 Smoke detector activation, unintentional	1	4	3	5	3	6	7	3	5	4	2		43	64
744 Detector activation, no fire - unintentional					2		1	2	1				6	11
745 Alarm system activation, no fire - unintentional	4	2	4	6	3	7	6	5	3	7	4		51	54
7451 False Alarm	11	7	6	7	8	6	6	3	6	5	3		68	84
746 Carbon monoxide detector activation, no CO	2	1	1	3	1	2	3	3	2	3	3		24	24
	35	**21**	**26**	**32**	**34**	**33**	**31**	**34**	**38**	**28**	**22**	**0**	**334**	390
SEVERE WEATHER & NATURAL DISASTER														
814 Lightning strike (no fire)			1										1	
	0	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	0
SPECIAL INCIDENT TYPE														
900 Special type of incident, other									1				1	
911 Citizen Complaint					1	3			1				5	1
	0	**0**	**0**	**0**	**1**	**3**	**0**	**0**	**2**	**0**	**0**	**0**	**6**	1
Not Reported					2			2	1				5	23
	0	**0**	**0**	**0**	**2**	**0**	**0**	**2**	**1**	**0**	**0**	**0**	**5**	23
MONTHLY RUN TOTAL	**583**	**549**	**665**	**684**	**646**	**617**	**668**	**645**	**621**	**661**	**676**	**0**	**7015**	6915
BLS Transports	**138**	**154**	**167**	**177**	**154**	**161**	**161**	**161**	**154**	**174**	**189**		**1790**	1716

SOUTH METRO FIRE DEPARTMENT

1650 Humboldt Avenue • West St. Paul MN 55118
Phone: (651) 552-4176 • FAX: (651) 552-4195
www.southmetrofire.com

DATE: December 20, 2023

TO: President and Board

FROM: Mark Juelfs, Fire Chief

RE: Services Agreement Renewal

Summary:
In addition to the Joint and Cooperative Agreement for Fire Protection Services (commonly referred to as the JPA) signed by both cities in 2005, there is also a Services Agreement between both cities and South Metro. The existing Services Agreement between South Metro Fire and the Cities of South St Paul and West St Paul will expire on December 31, 2023. This agreement has worked well with only a few minor changes since first being implemented in 2007.

The agreement was sent to both Cities for review and input on any needed changes to the agreement. There were a few minor adjustments to the service agreement that both Cities and Staff agreed upon. Staff supports renewing the current agreement for a two-year period.

Budget Impact:
There have been no identified changes to the budget because of renewing this agreement.

Recommendation:
Approve Resolution 2023-06 Approving Services Agreement with West St Paul and South St Paul

Attachments:
Services Agreement
Resolution 2023-06 Approving Services Agreement with West St Paul and South St Paul

SERVICES AGREEMENT

THIS AGREEMENT FOR SERVICES is entered into as of January 1, 2024, by and among South Metro Fire Department, a Minnesota joint powers entity, the City of South St. Paul, a Minnesota municipal corporation, and the City of West St. Paul, a Minnesota municipal corporation.

RECITALS

WHEREAS, the City of West St. Paul and the City of South St. Paul formed a joint powers consolidated fire department pursuant to Minnesota Statute, Section 471.59, named the "South Metro Fire Department."

WHEREAS, the South Metro Fire Department agrees to provide fire prevention, protection, and related services within the corporate limits of the Cities, upon the terms and subject to the conditions of this Agreement.

WHEREAS, each City agrees to provide certain services pursuant to this Agreement.

AGREEMENT

NOW, THEREFORE, in consideration of the promises and the covenants contained herein, and other good and valuable consideration, the receipt and sufficiency of which are acknowledged, the Parties, intending to be legally bound by the terms and conditions of this Agreement, agree as follows:

ARTICLE ONE
DEFINITIONS

Section 1.01 **Definitions**. Unless the context clearly indicates a different meaning is intended, the following words and terms shall for the purposes of this Agreement have the meanings given them:

A. "Agreement" means this Agreement, as it may be amended, supplemented, or restated from time to time.

B. "Board" means the Board of Directors of South Metro Fire Department.

C. "Budget" means the budget adopted annually by the City Councils of the Cities in accordance with the procedure under Sections 7.3, 7.4, and 7.5 of the Joint Powers Agreement.

D. "Cities" means the City of South St. Paul and the City of West St. Paul; "City" means either one of the Cities.

E. "City Council" means the governing body of the City of South St. Paul or of the City of West St. Paul.

F. "Effective Date" means the Operational Date.

G. "Fire Chief" means the chief of the Fire Department.

H. "Fire Department" means the South Metro Fire Department.

I. "Joint Powers Agreement" means the Joint Powers Agreement dated October 25, 2005, between the Cities.

J. "Operational Date" means the date the employees, capital equipment, personal property and accounts receivable from the West St. Paul Fire Department and the South St. Paul Fire Department are transferred to the South Metro Fire Department and it becomes fully functional and operational.

K. "Parties" and "Party" means all of the entities named in the preamble of this Agreement, or any one of them.

L. "Service Center" means the South St. Paul Municipal Service Center that provides Vehicle Maintenance Services as outlined in Article Five.

M. "Station 1" means the portion of the building that the Fire Department leases from West St. Paul.

N. "Station 2" means the portion of the building that the Fire Department leases from South St. Paul.

O. "Uncontrollable Circumstances" means a delay resulting from a cause over which the Party required to make performance does not have control and that cannot or could not have been avoided by the exercise of reasonable care, including acts of God, accidents, war, civil unrest, embargoes, strikes, litigation, and delays of other Parties in the performance of its obligations under or incidental to this Agreement.

ARTICLE TWO
FIRE SERVICES

Section 2.01 **Engagement for Fire Services**. The Cities hereby engage the Fire Department to furnish Fire Services as of its Operational Date, within the present and future corporate limits of the Cities, and the Fire Department agrees to provide the Fire Services upon the terms and subject to the conditions of this Agreement, and subject to the occurrence of Uncontrollable Circumstances. In the event of Uncontrollable Circumstances, the Fire Chief shall have the discretion to allocate resources as deemed in the best interest of the Parties.

Section 2.02 **Definition of Fire Services.** "Fire Services" means fire prevention services, fire protection services, and related services, including structural fire fighting, fire suppression, rescue, hazardous materials operational level response, fire code inspection and enforcement, fire code, confined space operational level response, preconstruction building plan review, fire investigation, vehicle extrication, basic life support, emergency medical services, public education about fire prevention and safety, and fire cause and origin determination.

Section 2.03 **Leased Space.** Each City shall provide and maintain adequate facilities within its jurisdiction in which the Fire Department Station 1 and Station 2 shall be located, pursuant to lease agreements entered into by each City with the Fire Department.

ARTICLE THREE
BUDGET MATTERS

Section 3.01 **Budget Process**. The Fire Department shall provide each City Council with its proposed gross Budget by July 31~~15~~ each year. Each City shall equally share the cost of the annual Budget, which shall be due and payable in quarterly installments on January 1, April 1, July 1 and a final payment reconciling the balance due by October 31.

Section 3.02 **Advances in the Budget.** The Fire Department may request an advance from each City for a payment not yet due, but at no point shall the total annual payments made to the Fire Department by each City exceed its portion of the amount of the Budget, unless approved by both City Councils. Each City agrees to pay such advance within 30 days of the request.

Section 3.03 **Judgment and Liabilities.** In the event that the Fire Department is levied a judgment or liability or incurs an unanticipated and reasonably necessary expense that is not covered by insurance or another funding source, each City shall equally share the costs of such judgment, liability or necessary expense and shall pay the Fire Department within 30 days of the request by the Fire Department.

Section 3.04 **Quarterly Reporting to Councils.** The Fire Chief shall present written budget reports to the City Councils on a quarterly basis, or more often, if so requested by the Councils.

Section 3.05 **Audit**. The Board shall cause an annual audit of the financial affairs of the Fire Department to be performed by an independent certified accountant in accordance with generally accepted auditing principles. A copy of the audit shall be provided to each City Council by June 30 of each year, unless an extension is approved by both city Councils.

Section 3.06 **Billing Residents.** The Fire Department may charge property owners, residents or non-residents who use the Fire Services by directly invoicing them for Fire

Services provided, including, but not limited to ambulance fees, fire permits, special equipment costs, false alarms, hazardous material response and inspections.

ARTICLE FOUR
FINANCIAL SERVICES

Section 4.01 **Contributed Financial Services.** West St. Paul shall provide the Fire Department with Financial Services on the attached Exhibit A.

ARTICLE FIVE
VEHICLE MAINTENANCE SERVICES

Section 5.01 **Contributed Vehicle Maintenance Services**. Fire Department shall engage South St. Paul to provide Vehicle Maintenance Services for all vehicles owned and operated by the Fire Department to keep them in good, operating condition. The Vehicle Maintenance Services shall be performed pursuant to the schedule provided on Exhibit B. The Fire Department may elect to undertake simple repairs and parts replacements when South St. Paul maintenance services are not available or when the Department can more practicably perform the work. Upon submittal of an appropriate parts billing invoice, South St. Paul shall duly reimburse the Department for that part's cost.

Section 5.02 **Definition of Vehicle Maintenance Services.** "Vehicle Maintenance Services" means scheduled, preventative, and/or routine vehicle maintenance such as oil changes, tire changes, brake servicing, tune-ups, replacement of filters, and coolant flushing. It also includes routine and ordinary repair and replacement of damaged, failing or worn vehicle components, including batteries and headlights. Vehicle Maintenance Services does not include the purchase of tires for engine and ladder trucks, bodywork or the repair or replacement of ancillary equipment related to the fire fighting operations.

Section 5.03 **Location of Services.** Most truck chassis repairs shall be performed at the South St. Paul Municipal Service Center, with the exception of pump testing, spring repair and tire repair. The Service Center will stock items needed for routine and ordinary maintenance. In unique cases, the work may be performed at Station 1, Station 2 or roadside.

ARTICLE SIX
INFORMATION TECHNOLOGY MATTERS

Section 6.01 **Contributed Information Technology Services in West St. Paul**. The Fire Department shall engage West St. Paul to provide Information Technology Services to the Fire Department for the members of the Fire Department in Station 1 at no cost to the Fire Department.

Section 6.02 **Contributed Information Technology Services in South St. Paul.** The Fire Department shall engage South St. Paul to provide Information Technology Services to the Fire Department for the members of the Fire Department in Station 2 at no cost to the Fire Department.

Section 6.03 **Definition of Information Technology Services.** "Information Technology Services" means first-response trouble-shooting of computer and Internet systems, basic systems maintenance and user support.

ARTICLE SEVEN
INDEMNIFICATION

Section 8.01 **Mutual Indemnification**. The Parties shall mutually indemnify and hold each other, and each of their respective elected official, officers, and employees, harmless from and against any and all liability and expense of any kind, including legal costs and reasonable attorneys' fees, arising from the negligent acts or omissions of the other Parties, their elected officials, officers, and employees with respect to their performance of this Agreement.

Section 8.02 **Liability Limitation**. The indemnity under Section 8.01 above does not constitute a waiver by any of the Parties of limitations of liability provided by applicable Minnesota law, including Minnesota Statutes, Chapter 466.

ARTICLE EIGHT
INSURANCE

Section 9.01 **Insurance**. The Parties and their personnel shall be covered by a policy or policies of general liability insurance in amounts of coverage not less than the limitations of liability under Minnesota Statute, Section 466.04, as it may be amended from time to time, or a successor statute.

ARTICLE NINE
TERM

Section 10.01 **Term**. This Agreement shall be effective on January 1, 2024, and shall continue until December 31, 2025, unless terminated (a) by agreement of the Parties; or (b) upon dissolution of the Fire Department under Article Nine of the Joint Powers Agreement.

ARTICLE TEN
GENERAL PROVISIONS

Section 11.01 **Notices**. Each notice, approval, consent, communication, and delivery required or permitted under this Agreement shall be delivered in person, by

facsimile transmission, or first class mail to facsimile numbers or addresses provided below and shall be deemed received (a) if delivered in person, on the date of personal delivery; (b) if transmitted by facsimile, on the date of telephonic confirmation of receipt; or (c) if sent by first class mail, on the third business day after mailing.

If to the City of South St. Paul:	City of South St. Paul Municipal Building 125 Third Avenue North South St. Paul, MN 55075 Attn: City Administrator Fax: (651) 554-3201
If to the City of West St. Paul:	City of West St. Paul City Hall 1616 Humboldt Avenue West St. Paul, MN 55118 Attn: City Manager Fax: (651) 552-4190
If to Fire Department, by certified mail:	South Metro Fire Department 1650 Humboldt Avenue West St. Paul, MN 55118 Attn: Fire Chief Fax: (651) 552-4195

Any Party, by written notice to the other Parties, may change its address or addressee.

Section 11.02 **Counterparts**. This Agreement may be signed in more than one counterpart, each of which shall be deemed to be an original, but all of which taken together shall be deemed a single instrument.

Section 11.03 **Effect of Termination**. This Agreement shall continue in effect upon and after its termination, to the extent necessary for the enforcement of any of its provisions that apply subsequent to any such termination.

Section 11.04 **Non-assignability**. A Party shall not assign any interest in this Agreement nor shall transfer any interest in the same, without the prior written consent of the other Parties.

Section 11.05 **Alteration**. Any alteration, amendment, variation, modification, or waiver of the provision(s) of this Agreement shall not be valid until it has been reduced to writing and signed by the Parties.

Section 11.06 **Waiver**. The waiver of any of the rights or remedies under this Agreement on any one occasion by any Party shall not constitute a waiver of any rights or remedies with respect to any subsequent breach or default of the same terms of this

Agreement. The rights and remedies provided or referred to under the terms of this Agreement are cumulative and not mutually exclusive.

Section 11.07 **Severability**. If any part, term, or provision of this Agreement is held by a court of competent jurisdiction to be unenforceable, the validity of the remaining provisions shall not be affected, and the rights and obligations of the Parties shall be construed and enforced as if this Agreement did not contain the particular part, term, or provision held to be unenforceable.

Section 11.08 **Governing Law**. This Agreement shall be governed by, and construed in accordance with the laws of the State of Minnesota.

Section 11.09 **Headings**. The headings to the sections of this Agreement are only for convenience of reference and are not intended, nor shall they be construed, to modify, limit, or expand the intent of the Parties as expressed in this Agreement.

Section 11.10 **Further Actions**. The Parties agree to execute such further documents and take such further actions as may reasonably be required to carry out the provisions and intentions of this Agreement.

Section 11.11 **Parties in Interest**. This Agreement shall be binding upon and inure solely to the benefit of the Parties, and nothing in this Agreement, express or implied, is intended to confer upon any other person or entity any rights or remedies of any nature under or by reason of this Agreement.

Section 11.12 **Effective Date**. This Agreement shall be effective as of the date first written above.

Section 11.13 **Review of Services.** Services contributed by each City shall be reviewed biennially by the Fire Chief as to whether the monetary value of the contributed services is roughly equivalent. Unresolved differences of opinion from the Parties about the rough equivalence of contributed services shall be forwarded to the South Metro Fire Board for consideration and direction.

The Parties have executed this Agreement by their respective duly authorized representatives in the date set forth opposite their names.

Dated: _____ _____, 2023. SOUTH METRO FIRE DEPARTMENT

By: _____
Name: Dave Napier
Title: President

Dated: _____ _____, 2023. CITY OF SOUTH ST. PAUL

By: _____
Name: James P. Francis
Title: Mayor

and

By: _____
Name: Deanna Werner
Title: City Clerk

Dated: _____ _____, 2023. CITY OF WEST ST. PAUL

By: _____
Name: Dave Napier
Title: Mayor

and

By: _____
Name: Nate Burkett
Title: City Manager

EXHIBIT A
FINANCIAL SERVICES

- Prepare and submit all W-9s and 1099s.
- Enter receipts into New World accounting system
- Prepare various financial related reports as needed
- Cash-flow analysis and recommendations
- Reconcile bank statements on a monthly basis
- Prepare and track federal and state gas tax refunds
- Prepare and track quarterly MN Care tax payments
- Reconcile petty cash and operating cash funds as needed
- Coordinate annual audit and prepare audit workpapers

EXHIBIT B
VEHICLE MAINTENANCE SERVICES SCHEDULE

- Front line trucks will be serviced every 200 hours.~~three (3) (150 hrs) times per year~~.
- Front line ambulances will be serviced every 3000 miles.~~four (4) (150 hrs) times per year~~.
- Second line trucks will be serviced two (2) times per year.
- Administrative vehicles will be serviced every 3,000 miles.
- ~~Small engine components mounted on trucks will be incorporated into the service interval times.~~
- Trailers, boats and ATV will be serviced one (1) time per year and inspected periodically for safety defects.
- ~~Small engine equipment stored in the vehicles or Department facilities will be inspected periodically and serviced accordingly or as needed.~~
- One (1) time per year a Department of Transportation inspection will be included in one of the regular scheduled services for the above vehicles. No certificate is required; however, all forms related to such inspection shall be completed by the Service Center and submitted to the Fire Department.
- All vehicles will have a service slip outlining repair or Preventative Maintenance initiated by the Fire Department. Forms will be completed by the Service Center and returned with the vehicle.
- ~~The Fire Department and Service Center will designate members for a Quality Assurance Process (QA). The QA will meet a minimum of once per quarter.~~
- All phone calls to the Service Center will be returned within 4 hours.
- The Fire Department will forward to the Service Center staff all NIOSH safety directives. The Service Center personnel will review the documentation and reports.

South Metro Fire Department

Resolution Number 2023-06

RESOLUTION APPROVING SERVICES AGREEMENT WITH WEST SAINT PAUL AND SOUTH SAINT PAUL

WHEREAS, the Joint and Cooperative Agreement for Fire Protection Services made on October 25, 2005 between the cities of West St. Paul and South St. Paul authorized the Board of Directors ("Board") to contract for fire services; and

WHEREAS, a Services Agreement ("Agreement") was approved by the Board and the Councils of the cities of West St. Paul and South St. Paul that articulates the services each party will provide; and

WHEREAS, the Agreement expires on December 31, 2023; and

WHEREAS, the parties have agreed that there are no necessary modifications and desire to renew the current agreement for another two year term.

NOW, THEREFORE, BE IT RESOLVED that the board of Directors hereby approves the Services Agreement with the City of West St. Paul and the City of South St. Paul.

Passed by the Board of Directors on December 20, 2023.

Attest:

_____

Wendy Berry, Secretary

SOUTH METRO FIRE DEPARTMENT

1650 Humboldt Avenue • West St. Paul MN 55118
Phone: (651) 552-4176 • FAX: (651) 552-4195
www.southmetrofire.com

DATE: December 20, 2023

TO: President and Board

FROM: Mark Juelfs, Fire Chief

RE: 2024 Waiver of Liability

Summary:
We are currently waiting to receive renewal information related to our property & casualty, liability and worker's compensation coverages that expire on 12/31/2023. At each renewal, the LMCIT requires the completion of a Liability Coverage Waiver Form indicating our desire to waive or not waive tort liability limits. Historically, South Metro Fire has not waived the tort liability limits established by Minnesota Statute 466 except as defined in the HealthEast contract, which is covered by a specific liability policy. Since the LMCIT Waiver Form does not reflect South Metro Fire's needs, including the excess coverage required by the HealthEast contract, attached is a resolution that achieves our objective. This resolution is essentially the same as in years past.

Recommendation:
Approve Resolution 2023-07 Approving Liability Coverages

Attachments:
Resolution 2023-07 Approving Liability Coverages for the South Metro Fire Department
LMCIT Liability Coverage – Waiver Form

LEAGUE OF MINNESOTA CITIES

CONNECTING & INNOVATING
SINCE 1913

LIABILITY COVERAGE – WAIVER FORM

Members who obtain liability coverage through the League of Minnesota Cities Insurance Trust (LMCIT) must complete and return this form to LMCIT before the member's effective date of coverage. Return completed form to your underwriter or email to pstech@lmc.org.

The decision to waive or not waive the statutory tort limits must be made annually by the member's governing body, in consultation with its attorney if necessary.

Members who obtain liability coverage from LMCIT must decide whether to waive the statutory tort liability limits to the extent of the coverage purchased. The decision has the following effects:

- *If the member does not waive the statutory tort limits*, an individual claimant could recover no more than $500,000 on any claim to which the statutory tort limits apply. The total all claimants could recover for a single occurrence to which the statutory tort limits apply would be limited to $1,500,000. These statutory tort limits would apply regardless of whether the member purchases the optional LMCIT excess liability coverage.

- *If the member waives the statutory tort limits and does not purchase excess liability coverage*, a single claimant could recover up to $2,000,000 for a single occurrence (under the waive option, the tort cap liability limits are only waived to the extent of the member's liability coverage limits, and the LMCIT per occurrence limit is $2,000,000). The total all claimants could recover for a single occurrence to which the statutory tort limits apply would also be limited to $2,000,000, regardless of the number of claimants.

- *If the member waives the statutory tort limits and purchases excess liability coverage*, a single claimant could potentially recover an amount up to the limit of the coverage purchased. The total all claimants could recover for a single occurrence to which the statutory tort limits apply would also be limited to the amount of coverage purchased, regardless of the number of claimants.

Claims to which the statutory municipal tort limits do not apply are not affected by this decision.

LMCIT Member Name: South Metro Fire Department

Check one:

☑ The member **DOES NOT WAIVE** the monetary limits on municipal tort liability established by Minn. Stat. § 466.04.

☐ The member **WAIVES** the monetary limits on municipal tort liability established by Minn. Stat. § 466.04, to the extent of the limits of the liability coverage obtained from LMCIT.

Date of member's governing body meeting: December 20, 2023

Signature: _____ Position: Secretary

145 UNIVERSITY AVE. WEST
ST. PAUL, MN 55103-2044

PHONE: (651) 281-1200 FAX: (651) 281-1299
TOLL FREE: (800) 925-1122 WEB: WWW.LMC.ORG

South Metro Fire Department

Resolution Number 2023-07

RESOLUTION APPROVING LIABILITY COVERAGES FOR THE SOUTH METRO FIRE DEPARTMENT

WHEREAS, on January 1, 2008, South Metro Fire Department began operation as its own entity; and

WHEREAS, as a joint powers entity under Minnesota Statutes, Section 471.59, created pursuant to the powers authorized by its parent municipalities, South Metro Fire will be afforded the protections of tort liability limits of Minnesota Statutes, chapter 466; and

WHEREAS, one of the services provided by South Metro Fire will be Basic Life Support ambulance services, which will be provided under a contract with HealthEast Care System; and

WHEREAS, South Metro wants to retain its statutory tort liability limits with respect to all claims except for those brought by HealthEast Care System pursuant to an indemnity action under the contract with HealthEast Care System; and

WHEREAS, the following language in Article 7 of the contract with HealthEast Care System further clarifies the recovery limits by HealthEast;

> "In any claim by HealthEast under this Article VII, South Metro Fire hereby agrees that the statutory tort liability limits and governmental immunities contained in Minnesota Statutes, Chapter 466 shall not limit HealthEast's recovery (if any) to the limits stated therein. However, recovery by HealthEast shall be limited by the maximum insurance coverage required in Article VI with respect to all liabilities, actions, damages, claims, demands, judgments, losses, costs or expenses (including attorneys' fees). This section is for the benefit of HealthEast only and shall not establish any benefit to third parties."

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors that the South Metro Fire Department DOES NOT waive the monetary limits on tort liability established by Minnesota Statutes Section 466 and desires to have the liability coverage for any and all claims except as follows:

For any action brought by HealthEast Care System in an indemnity action under the contract with South Metro Fire, the following coverage shall apply:

1.	General and Professional liability coverage	$1 million per claim $3 million annual aggregate

2.	Automobile liability	$1 million per claim $5 million annual aggregate
3.	Umbrella coverage over both 1 & 2	$5 million

Passed by the Board of Directors on December 20, 2023.

Attest:

_____

Wendy Berry, Secretary

SOUTH METRO FIRE DEPARTMENT

1650 Humboldt Avenue • West St. Paul MN 55118
Phone: (651) 552-4176 • FAX: (651) 552-4195
www.southmetrofire.com

DATE: December 20, 2023

TO: President and Board

FROM: Mark Juelfs, Fire Chief

RE: Fee Schedule

Summary:
The annual review and approval of the Department's Fee Schedule has been identified as a best practice. Staff has reviewed the current fee schedule and is not recommending any changes to our current fee schedule.

Budget Impact:
No Budgetary Impact.

Recommendation:
Approve Resolution 2023-08 Establishing Fee Schedules Rates

Attachment:
Resolution 2023-08 Establishing Fee Schedules Rates

South Metro Fire Department

Resolution No. 2023-08

RESOLUTION ESTABLISHING FEE SCHEDULE RATES

WHEREAS, the Board most recently approved the fee schedule by Resolution 2022-04 on December 21, 2022, which is the fee schedule for services provided by the South Metro Fire Department; and

WHEREAS, the Fire Chief recommends no increase to the listed fees; and

NOW, THEREFORE, BE IT RESOLVED the Board of Directors approves the following Fees for the South Metro Fire Department.

SERVICE PROVIDED	**FEE**
Fire Alarm Installation Permit	1.25% of value of the work or $75.00 minimum
Sprinkler System Permit	1.25% of value of the work or $75.00 minimum
General Fire Prevention Permit	1.25% of value of the work or $75.00 minimum
Hood Cleaning Permit	$75.00
Fuel Tank Installation/Removal Permit	$75.00
Temporary LP System Permit	$75.00
Temporary Tents and Membrane Structures Permit	$75.00

****Failure to obtain a permit prior to starting work will result in a permit fee two times the regular permit fee established herein****

Firework Sales – Inspection Fee	$75.00
Re-Inspection Fee	$75.00
False Alarm Response	
0-3 Alarms per year	No Charge
4-6 Alarms per year	$117.50
More than 6 Alarms per year	$170.50

Aerial Ladder	$440.00 per hour
Ambulance/Rescue	$240.00 per hour
ATV (off-road vehicle)	$40.00 per hour
Command Vehicle	$140.00 per hour
Engine	$340.00 per hour
Fire Boat	$270.00 per hour
Utility Vehicle (pickup truck)	$100.00 per hour

Personnel – On-duty	Hourly wage + 35% benefits
Personnel – Off-duty/call back	Double time + 35% benefits

Passed by the Board of Directors on December 20, 2023.

Attest:

_____

Wendy Berry, Secretary

South Metro Fire Department

Resolution Number 2023-09

RESOLUTION ACCEPTING PROCEEDS FROM THE EMS TAX LEVY TO BE USED FOR EMERGENCY MEDICAL SERVICES

WHEREAS, on May 1, 2012, the cities of South St. Paul and West St. Paul entered into a Joint and Cooperative Agreement for an Emergency Medical Services Special Taxing District (hereinafter the "EMS Taxing District" or the "District") and established a Board of Directors to govern, oversee, equip and manage the EMS Taxing District; and

WHEREAS, the Board of the EMS Taxing District adopted a tax levy of $1,938,696 on November 15, 2023; and

WHEREAS, the Board of the EMS Taxing District authorized the South Metro Fire Department to use those levy proceeds for out-of hospital emergency medical services as defined by Minn. Stat. §144F.01 subd. 5, or as may be amended; and

WHEREAS, the South Metro Fire Department desires to use such proceeds as authorized by the EMS Taxing District Board.

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of the South Metro Fire Department that it agrees to use the EMS Taxing District's adopted tax levy proceeds for out-of hospital emergency medical services as authorized by Minn. Stat. §144F.01 subd. 5, or as may be amended.

Passed by the Board of Directors on December 22, 2023.

Attest:

_____

Wendy Berry, Secretary

SOUTH METRO FIRE DEPARTMENT

1650 Humboldt Avenue • West St. Paul MN 55118
Phone: (651) 552-4176 • FAX: (651) 552-4195
www.smfdmn.org

DATE: December 20, 2023

TO: President and Board

FROM: Mark Juelfs, Fire Chief

RE: Standards of Cover Study

Summary:
At the November board meeting Citygate and Associates presented the draft Standards of cover study to the Board. After discussion the Board had two questions regarding the contents of the study.

The first question was whether the number of stations would have an impact on the South Metro's staffing levels. This was discussed during the meeting with Citygate and associates. With our current two station model South Metro can only assemble an effective response force of 8-13 personnel, the recommended effective response force is 16-17 personnel. A reduction from two stations to one station will not reduce the number of personnel required to assemble an effective response force. This statement has been added to the final study document in challenge 3 and recommendation number 5.

The second question was regarding the length of dispatch times that are in the study document. Staff looked at the monthly reports from Dakota 911 and reviewed the study dispatch times and found that although the overall dispatch time is 2:40 minutes for all call types in the study data (July 2020 – June 2023), the dispatch time for echo medicals (the most critical) is an average of 1:08 minutes and the 90th percentile time is 1:52 minutes. The dispatch time for echo fires (the most critical) is an average of 1:10 minutes and the 90th percentile time is 1:46 minutes.

The October monthly report from Dakota 911 indicates that the average dispatch time for echo medicals in the County was 0:59 minutes and the 90th percentile was 1:17 minutes. The average dispatch time for echo fires in the County was 0:47 minutes and the 90th percentile was 0:57 minutes. The year-to-date average for echo medicals is 1:03 minutes and the 90th percentile is 1:43 minutes. The year-to-date average for echo fires is 0:56 minutes and the 90th percentile is 1:25 minutes. The reported October times showed an improvement over the year-to-date times and the study times which indicates we are trending in the right direction.

Staff will continue to monitor the times that are being reported monthly from Dakota 911 and work with them to alleviate any of our concerns.

Budget Impact:
Currently this document is information only. If the recommendations from the study are implemented there will be budgetary impacts that will be presented to the Board at a future meeting.

Recommendation:
Discuss the findings and recommendations and how the Board would like to move forward.

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EXECUTIVE SUMMARY

The South Metro Fire Department (Department) retained Citygate Associates, LLC (Citygate) to conduct a Standard of Coverage deployment evaluation based on nationally recognized guidelines and best practices, federal and state mandates, and relevant local and regional operating procedures. This evaluation is intended to establish recommended minimum requirements relative to the deployment of fire suppression operations, emergency medical operations, and special operations for the Department to consider, and to create a template for future deployment and performance analysis.

This study is presented in several parts, including this Executive Summary, which includes all findings and recommendations, and Standards of Coverage (SOC) Assessment supported by maps and response statistics. A separate **Map Atlas** (**Volume 2**) contains all the maps referenced throughout this report. Overall, there are **15** findings and **5** actionable recommendations.

POLICY CHOICES FRAMEWORK

There are no mandatory federal or state regulations directing the level of fire service staffing, response times, or outcomes in the U.S.; however, if services are provided at all, local, state, and federal regulations must be followed for the safety of the public and for the personnel providing the services.

Thus, the level of fire protection services provided is a *local policy decision*. Communities have the level of fire services they can afford and choose to purchase, which may not always be the level desired.

FIRE SERVICES DEPLOYMENT SUMMARY

The Department serves an urban/suburban population with a mixed residential and non-residential land-use pattern typical of other Twin City area cities of similar size and demographics. The open spaces and highways in both cities, and the more curvilinear road network outside of the older core areas, produce barriers to providing fast response times from the fewest possible fire stations.

Given the risks to be protected and the desire for positive emergency outcomes, the Department's service area will always need both first-due unit and multiple-unit ERF coverage consistent with controlling a building fire to near the room(s) of origin and improving the chance of survival for patients with life-threatening medical emergencies.

The Department's deployment system is stressed in three key areas:

1. Dispatch processing and travel time performance
2. The rising rate of emergency medical incidents

3. The travel time coverage *and staffing* limitations of the current two fire stations

Challenge #1 – Dispatch Processing and Travel Time Performance

The following table shows the Department's response performance over the most recent year of complete data compared to best practices for positive outcomes. As can be seen, the weakest components are call processing/dispatch, first-unit travel, and ERF travel performance, although overall call-to-arrival performance was faster than Citygate's 7:30-minute recommended goal by a full minute.

Table 1—90th Percentile Response Performance Summary RY 22/23

Response Component	Recommended Best Practice		90th Percentile Performance	Performance Compared to Best Practice
	Time	Reference		
Call Processing / Dispatch	1:30 1:04 Critical	Citygate NFPA	**2:40**	**+ 1:10**
Crew Turnout	2:00 1:00	Citygate NFPA	**1:38**	**- 0:22**
First Unit Travel	4:00	Citygate NFPA	**5:10**	**+ 1:10**
First Unit Call-to-Arrival	7:30	Citygate	**6:30**	**- 1:00**
ERF Travel	8:00	Citygate NFPA	**9:53**	**+ 1:53**

Challenge #2 – Rising EMS Demand

The state of health care coverage in the United States has created an ever-increasing EMS demand on America's fire service—which is exacerbated by the unhoused crisis, thus creating a high demand for low-acuity EMS responses for patients that seldom need immediate emergency room care. The Department and regional paramedic system are also facing this challenge. Citygate submits that adding more BLS ambulance transport capacity via the Department is not the best way forward. There needs to be a subregional, non-9-1-1, non-sworn firefighter response team jointly funded by local government and the health care system to respond to mental health and low-acuity medical incidents that do not require emergency room care.

Challenge #3 – Fire Station Travel Time Coverage and Staffing Limitations

The service area is simply too large for only one fire station to provide response times that achieve desired urban/suburban community outcomes. The excellent *Department-wide* total response time performance over the three-year study period is due only to many incidents being close to *both* fire

stations. Any reduction in station coverage will appreciably lengthen travel times past desired positive outcomes in urban areas—even more so in the northwest and southwest sections of the service area that have higher population densities.

Ideally, if both stations could be moved and a third station added, the service area needs the added station to form an "inverted triangle" of coverage, with two stations in the upper half of the service area and one in the southeast to serve that area.

In addition, the Department's current daily staffing provides an Effective Response Force (ERF or First Alarm) of only 8 personnel at minimum staffing and 13 (including a Chief Officer, when available) at full staffing, which is less than the recommended ERF of 16–17 personnel[1] to safely accomplish the critical tasks for a low- to moderate-risk building fire in time to achieve positive outcomes. Citygate recommends the JPA consider increasing the minimum daily staffing to at least 12 personnel plus a chief officer as funding allows. This would provide an ERF meeting recommended best practice with a single automatic-aid resource from an adjacent fire agency. Reducing from the current two station model to a one station model would not reduce the minimum daily staffing required to provide an ERF.

Considering the limited projected growth, Citygate recommends the Department adopt a 5:00-minute travel time and, when that measure cannot be substantially met, a third station should be considered.

FINDINGS AND RECOMMENDATIONS

Deployment Findings

Based on the technical analysis of this assessment, Citygate makes the following deployment findings.

Finding #1: The Department's response unit types and quantities are appropriate to protect against the hazards likely to impact the service area.

Finding #2: The Department has not established response performance goals as recommended by the CFAI and the NFPA.

Finding #3: The Department's deployment model provides a minimum of eight personnel on duty daily, and a maximum of 12 personnel.

[1] NFPA 1710 Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments (2020 Edition)

Finding #4: The Department does not have 27/7/365 incident command (chief officer) coverage. The four chief officers must respond from the office or home and are not always immediately available.

Finding #5: The Department has a standard response plan that considers risk and establishes an appropriate initial response for each incident type; each type of call for service receives the combination of engines, ladder trucks, specialty units, and command officers customarily needed to effectively control the type of incident based on Department experience.

Finding #6: The Department's current fire station locations can be expected to deliver 5:00-minute first-due travel time coverage to 85.7 percent of the service area's total public road miles, which is good coverage to achieve desired outcomes.

Finding #7: The service area is too large to cover from either current station location even at the 5th minute of travel, leaving large areas of the other City well beyond 5:00-minute coverage.

Finding #8: Two simultaneous calls for service occur 39 percent of the time in 22/23.

Finding #9: Simultaneous incidents are increasing annually in Station 1's response area.

Finding #10: Simultaneous incidents predominantly draw Station 2 west to the middle of the shared service area.

Finding #11: Call processing performance, at 2:40 minutes in RY 22/23, is substantially slower than the 1:30-minute best practice goal.

Finding #12: Crew turnout performance in RY 22/23 was 22 seconds *faster* than a recommended 2:00-minute best practice goal. Turnout time is not part of the slower call-to-arrival total response times.

Finding #13: At 5:10 minutes in RY 22/23, first-unit travel time performance to fire and EMS incidents was 1:10 minutes *slower* than a recommended 4:00-minute best practice goal to facilitate desired outcomes in urban/suburban areas. The longer measures hold constant across the districts and years measured. The service area is too large to deliver 4:00-minute travel coverage from only two stations.

Finding #14: Department-wide first-unit call-to-arrival performance, at 6:30 minutes for RY 22/23, was *better* than a 7:30-minute Citygate-recommended best practice goal by 1:00 minute. Total response time performance is good overall and overcomes weak travel time performance due to the excellent crew turnout time and that many of the incidents are close to the two fire station locations.

Finding #15: Multiple-unit building fire travel time performance exceeded recommended best practice in 22/23 by 1:15 minutes primarily due to only two stations in the service area.

Deployment Recommendations

Based on the technical analysis and findings contained in this assessment, Citygate makes the following deployment recommendations.

Recommendation #1: Adopt a 5:00-minute travel time goal for fire station spacing.

Recommendation #2: Continue to work with the appropriate County health, regional hospitals, and other first responder agencies to implement a non-9-1-1 care team for behavorial and non-acute medical issues

Recommendation #3: **Adopt Updated Deployment Policies:** The JPA should adopt complete response performance measures to aid deployment planning and to monitor response performance. The measures of time should be designed to deliver outcomes that will prevent death or more serious injury for EMS patients upon arrival when possible and keep small fires from becoming more serious. With this in mind, Citygate recommends the following measures.

3.1 **First-Due Unit:** To treat pre-hospital medical emergencies and control small fires, the first-due unit should arrive within 8:30 minutes, 90 percent of the time, from receipt of the 9-1-1 call at County dispatch. This equates to a 1:30-minute call processing / dispatch time, a 2:00-minute crew turnout time, and a 5:00-minute travel time.

3.2 **Multiple-Unit Effective Response Force for Serious Emergencies:** To confine building fires near the room or rooms of origin, keep vegetation fires under one acre in size, and treat multiple medical patients at a single incident, a multiple-unit ERF of at least 15 personnel, including at least one Chief Officer, should arrive within 11:30 minutes from the time of call receipt at County dispatch at 90 percent or better reliability. This equates to a 1:30-minute call processing / dispatch time, a 2:00-minute crew turnout time, and an 8:00minute travel time, -respectively.

3.3 **Hazardous Materials Response:** To protect the service area from hazards associated with uncontrolled release of hazardous and toxic materials, the fundamental mission of the Department's response is to isolate the hazard, deny entry into the hazard zone, and minimize impacts on the community. This can be achieved with a first-due total response

time of 8:30 minutes or less to provide initial hazard evaluation and mitigation actions. After the initial evaluation is completed, a determination can be made whether to request additional resources to mitigate the hazard.

3.4 **Technical Rescue:** To respond to technical rescue emergencies as efficiently and effectively as possible with enough trained personnel to facilitate a successful rescue, a first-due total response time of 8:30 minutes or less is required to evaluate the situation and initiate rescue actions. Additional resources should assemble as needed within a total response time of 11:30 minutes or less to safely complete rescue/extrication and delivery of the victim to the appropriate emergency medical care facility.

Recommendation #4: Maintain the current two-station deployment model until the recommended 5:00-minute first-unit travel time measure cannot be substantially met, then a third station should be considered.

Recommendation #5: As funding allows, consider increasing minimum daily staffing from 8 to 12 plus a Battalion Chief on each shift, to meet recommended best practice multiple unit staffing to serious emergencies with one automatic aid resource from an adjacent fire agency. Reduction in the number of stations will not reduce the recommended increase in daily staffing.

NEXT STEPS

- Review and absorb the content, findings, and recommendations of this report.
- Adopt updated response performance goals as recommended.
- Work with the County agencies and regional health providers to field a non-9-1-1 behavioral and low-acuity medical response team.
- Consider increasing minimum daily staffing as funding allows.

SECTION 1—INTRODUCTION AND BACKGROUND

The South Metro Fire Department (Department) is a Joint Powers Authority (JPA) Fire Department formed in 2008 to provide fire, emergency medical, hazardous materials response, and rescue services to the Cities of South St. Paul and West St. Paul. The Department retained Citygate Associates, LLC (Citygate) to conduct a Standards of Coverage (SOC) Study fully compliant with nationally recognized guidelines and best practices, federal and state mandates, and relevant local and regional operating procedures. This study is intended to determine if the Department is appropriately deployed to meet its communities' risks and service level expectations. A review of the current two-station response model was also requested to determine the effectiveness in providing current and future fire services, with comparative response model alternatives evaluated in parallel. These study goals are intended to provide a template for future deployment and performance planning and evaluation.

Citygate's fire service deployment assessments are performed in accordance with the methodology outlined in *Standards of Cover* (Fifth and Sixth Editions) as published by the Commission on Fire Service Accreditation (CFAI). Our studies also incorporate guidelines and best practices in the field of fire service deployment and risk assessment from the National Fire Protection Association (NFPA), the Insurance Services Office (ISO), other recognized industry best practices, and stakeholder interests.

1.1 REPORT ORGANIZATION

This report is organized into the following sections. **Volume 2** (**Map Atlas**) is separately bound.

Executive Summary — A summary of current services and significant challenges, including key findings and recommendations.

Section 1 — **Introduction and Background:** An introduction to the study and background information about the City and Department.

Section 2 — **Standards of Coverage Assessment:** An overview of the SOC process and detailed analysis of the Department's existing deployment model, values to be protected, emergency outcome expectations, staffing needed for different emergency incident types (critical tasks), geographical distribution and concentration effectiveness of fire crew locations, reliability and historical response measures' effectiveness, and a concluding overall deployment evaluation.

Appendix A — **Community Risk Assessment:** A comprehensive assessment of the values at risk to be protected within the community and

evaluation of the fire and non-fire hazards likely to impact the service area as related to services provided by the Department.

1.1.1 Goals of the Report

This report cites findings and makes recommendations, as appropriate, related to each finding. Findings and recommendations throughout this report are sequentially numbered.

This document provides technical information about how fire services are provided and legally regulated, and how the Department is currently deployed and providing services to the Cities' residents, businesses, and visitors. This information is presented in the form of recommendations and policy choices for the JPA and Department to consider. The result is a solid technical foundation upon which to understand the advantages and disadvantages of the choices JPA and Department leadership face regarding fire service delivery, and more specifically, at what level of desired outcome and expense.

1.1.2 Limitations of the Report

There are no federal or state regulations requiring a specific minimum level of fire services. Through the public policy process, each community is expected to understand local fire and non-fire risks and its ability to pay for its chosen level of fire services. *If* fire services are provided at all, federal and state regulations specify how to safely provide them for the public and for the personnel providing the services.

While this report and technical explanation can provide a framework for the discussion of Department services, neither this report nor the Citygate team can make the final decisions or cost out every possible alternative in detail. Once final policy choices receive JPA direction, Department staff can conduct any final cost and fiscal analyses as typically completed in the JPA's normal operating and capital budget preparation cycle.

1.2 Project Approach and Scope of Work

1.2.1 Project Approach and Research Methods

Citygate utilized multiple sources to gather, understand, and model information about the cities and Department. Citygate requested a large amount of background data and documentation to better understand current costs, service levels, the history of service level decisions, and other prior studies.

In virtual meetings, Citygate performed focused interviews with the Department's project team members and other project stakeholders. Citygate reviewed information about the Cities' demographics and potential for future growth and development. Citygate also obtained map and response data from which to model current and projected fire service deployment, with the goal of

identifying the location(s) of stations and crew quantities required to best serve the Cities as they currently exist, and to facilitate future deployment planning.

Once Citygate gained an understanding of the Department's service area and its fire and non-fire risks, Citygate developed a model of fire services that was tested against the travel time mapping and prior response data to ensure an appropriate fit. Citygate also evaluated future growth and service demand and evaluated potential alternative emergency service delivery models. Subsequently, Citygate proposed an approach to address both current and longer-term needs. The result is a framework for enhancing Department services while meeting reasonable community expectations and fiscal realities.

1.2.2 Project Scope of Work

Citygate's approach to this assessment involved:

- Reviewing data and information provided by the Department and Cities and conducting listening sessions with project stakeholders.
- Utilizing Esri ArcGIS, a Geographic Information System (GIS) software mapping program, to model fire station travel time coverage.
- Using StatsFD™, an incident response time analysis program, to analyze prior incident performance and plot the results on graphs and geographic mapping exhibits.
- Identifying and evaluating future population and related development growth.
- Recommending appropriate, risk-specific response performance goals.

1.3 Service Area Overview

The City of South St. Paul, located in north-central Dakota County immediately south and southeast of St. Paul and east of West St. Paul, was incorporated in 1887 and encompasses six square miles with a population of approximately 21,000 residents. The City operates under the Council-Administrator form of government with six council members and a Mayor elected at large to staggered four-year terms. The City provides a full range of municipal services, including police, economic development, planning and zoning, building permits and inspections, code enforcement, engineering, housing, parks and recreation, public works, recycling, and library services. Fire protection services are provided by the South Metro Fire Department, a joint venture between the cities of West and South St. Paul. The City's adopted Fiscal Year 2023 budget is $23.68 million.

The City of West St. Paul, located in north-central Dakota County immediately adjacent to the State Capital of St. Paul, was incorporated in 1889 and encompasses five square miles with a

population of approximately 21,000 residents. The City operates under the Council-Manager form of government with six council members elected by Ward to staggered four-year terms, and the Mayor elected at large for a two-year term. The City provides a full range of municipal services, including police, construction and maintenance of streets and other infrastructure, recreation, and community development activities. Fire protection services are provided by the South Metro Fire Department, a joint venture between the cities of West and South St. Paul. The City's adopted Fiscal Year 2023 budget is $42.67 million.

1.3.1 Future Growth and Development

The Twin Cities regional plan[2] projects South St. Paul's population will increase slightly to 22,000 by 2040, and West St. Paul's to 23,100 over the same period.

With very few vacant, developable properties remaining in the City, South St. Paul will likely only experience limited development growth through 2040, with land use changes predominantly achieved through redevelopment.[3]

With physical expansion impossible due to being a fully developed inner-ring urban center community of the greater Minneapolis/St. Paul metroplex with coterminous city boundaries on all sides, future development in West St. Paul will be predominantly limited to redevelopment of existing land uses.[4]

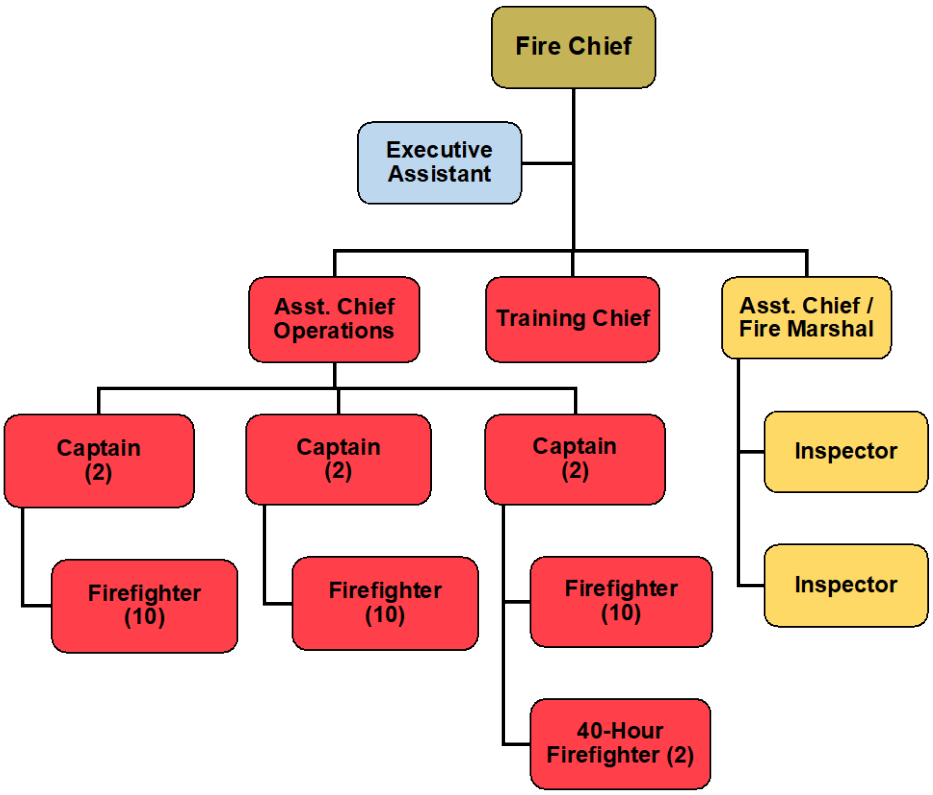
1.4 Fire Department Overview

1.4.1 Organization

Operating under the authority of a joint powers agreement between the cities of South St. Paul and West St. Paul, the South Metro Fire Department provides fire suppression, rescue, Basic Life Support (BLS) pre-hospital emergency medical, initial hazardous materials response, fire prevention, and public education services with a staff of 38 full-time operational response and seven administrative personnel organized as shown in the following figure.

[2] Thrive MSP 2040
[3] Reference: 2040 South St. Paul Comprehensive Plan, Section 4 – Land Use
[4] Reference: West St. Paul 2040 Comprehensive Plan

Figure 1—Organizational Chart – South Metro Fire Department



1.4.2 Facilities, Response Resources, and Staffing

The Department provides services from two fire stations as summarized in the following table.

Table 2—Fire Department Facilities, Response Resources, and Daily Response Staffing

Station Number	Address	Year Built	Response Resources	Minimum On-Duty Staffing
1	1650 Humbolt Ave. West St. Paul	1974 (re-modeled in 1999)	**Engine 1** **Ambulance 1** Ladder 1 Ambulance 3	**2** **2** ** ***
2	310 Marie Ave. South St. Paul	1956 (re-modeled in 2005)	**Engine 2** **Ambulance 2** Ladder 2 Boat 2 Rescue 2 UTV 2	**2** **2** ** **** **** ****
Total				**8**

** Cross-staffed as needed by the full-time ambulance crew

*** Staffed 40 hours/week

**** Staffed as need depending on incident type by on-duty or call-back personnel

The Department uses a typical three-platoon rotating shift system. Each platoon is budgeted for 12 personnel per day. The table above shows the minimum staffing of eight on duty (four per station) when personnel are off on earned leave or away at out-of-city training. For incident command chief officer coverage, the 40-hour schedule chief officers provide command coverage when available from the office or home. South Metro also staffs a third ambulance with two personnel working a 40-hour week.

1.4.3 Service Capacity

Service capacity refers to the Department's available response force; the size, type, and condition of its response fleet and any specialized equipment; core and specialized performance capabilities and competencies; resource distribution and concentration; availability of automatic or mutual aid; and any other agency-specific factors influencing its ability to meet current and prospective future service demand relative to the values to be protected. The Department provides services with two engines, two aerial ladder trucks, three ambulances, one rescue, one boat and one all-terrain vehicle. All response personnel are minimally trained to the Emergency Medical Technician (EMT) level. The Department also has several pharmacological and non-pharmacological medical variances to provide enhanced pre-hospital emergency medical services. The Department also provides BLS ground ambulance service within its service area.

Response personnel are also trained to the U.S. Department of Transportation Hazardous Material First Responder Operational (FRO) level to provide initial hazardous material incident assessment,

hazard isolation, and support for a technical hazardous material response team. Hazardous material emergency response is provided by the Dakota County Special Operations Team (DCSOT). The Department is a participating member of the DCSOT, which includes fire, police, and EMS personnel and provides hazardous materials and technical rescue services across the entire county.

The Department has automatic-aid agreements with its bordering city departments and mutual-aid agreements with all of Dakota County.

Finding #1:	The Department's response unit types and quantities are appropriate to protect against the hazards likely to impact the service area.

SECTION 2—STANDARDS OF COVERAGE ASSESSMENT

This section provides a detailed report of the Department's current ability to deploy and mitigate emergency hazards within its service area. The response analysis uses prior response statistics and geographic mapping to help the Department and the community visualize the capabilities and limitations of the current response system.

2.1 STANDARDS OF COVERAGE PROCESS OVERVIEW

The core methodology used by Citygate in the scope of its deployment analysis work is *Standards of Cover*, Fifth and Sixth Editions, which is a systems-based approach to fire department deployment published by the CFAI. This approach uses local risk factors and demographics to determine the level of protection best fitting a community's needs.

The SOC method evaluates deployment as part of a fire agency's self-assessment process. This approach uses risks and community expectations on outcomes to help elected officials make informed decisions on fire and emergency medical services deployment levels. Citygate has adopted this multiple-part systems approach as a comprehensive tool to evaluate fire station locations. Depending on the needs of the study, the depth of the components may vary.

Such a systems-based approach to deployment, rather than a one-size-fits-all prescriptive formula, allows for local determination. In this comprehensive approach, each agency can match local needs (risks and expectations) with the costs of various levels of service. In an informed public policy debate, a governing board "purchases" the fire and emergency medical service levels the community needs and can afford.

While working with multiple components to conduct a deployment analysis is admittedly more work, it yields a much better result than using only a singular component. For instance, if only travel time is considered and frequency of multiple calls is not, the analysis could miss over-worked companies. If a risk assessment for deployment is not considered and deployment is based only on travel time, a community could under-deploy to incidents.

The following table describes the eight elements of the SOC process.

Table 3—Standards of Coverage Process Elements

SOC Element		Description
1	Existing Deployment	Describing the current deployment model and response performance goals the agency has in place today.
2	Community Outcome Expectations	Reviewing the expectations of the community for responses to emergencies.
3	Community Risk Assessment	Identifying and quantifying the assets at risk to fire and non-fire hazards likely to impact the community. (For this report, see **Appendix A—Community Risk Assessment**.)
4	Critical Task Analysis	Reviewing the tasks that must be performed and the personnel required to deliver the stated outcome expectation.
5	Distribution Analysis	Reviewing the spacing of first-due response resources (typically engines) to control routine emergencies.
6	Concentration Analysis	Reviewing the spacing of fire stations so that more complex emergencies can receive sufficient resources and personnel in a timely manner (First Alarm Assignment or ERF).
7	Reliability and Historical Response Effectiveness Analysis	Using prior response statistics to determine the percent of compliance the existing system delivers.
8	Overall Evaluation	Proposing Standard of Coverage statements by risk type, as necessary.

Source: CFAI, *Standards of Cover*, Fifth Edition

Simply summarized, fire service deployment is about the ***speed*** and ***weight*** of the response. *Speed* refers to initial response (first-due), all-risk intervention resources (engines, ladder trucks, and ambulances) strategically deployed across a jurisdiction for response to emergencies within a specified time interval to control routine-to-moderate emergencies to achieve desired outcomes and prevent the incident from escalating to greater size or severity. *Weight* refers to multiple-unit responses for more serious emergencies, such as building fires, multiple-patient medical emergencies, vehicle collisions with extrication required, or technical rescue incidents where enough firefighters must be assembled within a reasonable time interval to safely control the emergency and prevent it from escalating into a more serious event. The following table illustrates this deployment paradigm.

Table 4—Fire Service Deployment Paradigm

Element	Description	Purpose
Speed of Response	Travel time of initial response of all-risk intervention units strategically located across a jurisdiction.	Controlling a routine-to-moderate emergency without the incident escalating in size or complexity.
Weight of Response	Number of firefighters in a multiple-unit response for serious emergencies.	Assembling enough firefighters within a reasonable time interval to safely control a more complex emergency without escalation.

Thus, smaller fires and less complex emergencies require a single-unit or two-unit response (*fully staffed* engine or specialty resource) within a relatively short response time. Larger or more complex incidents require more units and personnel to control. In either case, if the crews arrive too late or the total number of personnel is too few for the emergency, they are drawn into an escalating and more dangerous situation. The science of fire crew deployment is to spread crews out across a community or jurisdiction for quick response to keep emergencies small with positive outcomes without spreading resources so far apart that they cannot assemble quickly enough to effectively control more serious emergencies.

2.2 Current Deployment

SOC Element 1 of 8
Existing Deployment Policies

Nationally recognized standards and best practices suggest using several incremental measurements to define response time. Ideally, the clock starts when the Dakota County Communication Center (DCC) 9-1-1 dispatcher receives the emergency call. For South Metro, the response time clock starts when the DCC receives the 9-1-1 call into its computer-aided dispatch (CAD) system. Response time increments include the DCC call processing, crew alerting and response unit boarding (commonly called crew turnout), and actual driving (travel) time.

Best practice response time includes three distinct components of response: 9-1-1 call processing / dispatch, crew turnout, and travel, which combined equal Total Response Time. Goals should also address response performance to other risks within the service area, such as hazardous materials and technical rescue, as recommended by the CFAI. While the Department has not adopted a response performance goals other than crew turnout, it has a service-level history that can be documented in response times, number of response units and staffing, which will be reviewed and evaluated in this study.

Currently, NFPA Standard 1710, a recommended deployment standard for career fire departments in urban/suburban areas, recommends initial (first-due) intervention unit arrival within a 4:00-

minute *travel* time, and recommends arrival of all resources comprising the multiple-unit Effective Response Force (ERF or First Alarm) within 8:00 minutes travel at 90 percent or better reliability.[5]

If the travel time measures recommended by the NFPA and Citygate are added to dispatch processing and crew turnout times recommended by Citygate and best practices, then a realistic 90 percent first-unit total response time goal for urban response zones is 7:30 to 8:30 minutes from DCC receiving the call. This includes 1:30 minutes for call processing / dispatch, 2:00 minutes for crew turnout, and 4:00-5:00 minutes for travel.

Finding #2:	The Department has not established response performance goals as recommended by the CFAI and the NFPA.

2.2.1 Current Deployment Model

The Department staffs one engine and one ambulance at each station daily, each staffed with a minimum of two personnel. An additional 40-hour ambulance is staffed with two personnel at Station 1 8:00 am to 5:00 pm Monday through Friday. If needed, the aerial ladder truck at each station is cross staffed by the ambulance crew. Additional response resources are staffed as needed by on-duty or call-back personnel. This deployment model provides a minimum daily staffing of 8 personnel and a maximum of 12 personnel.

Finding #3:	The Department's deployment model provides a minimum of eight personnel on duty daily, and a maximum of 12 personnel.
Finding #4:	The Department does not have 27/7/365 incident command (chief officer) coverage. The four chief officers must respond from the office or home and are not always immediately available.

2.2.2 Response Plan

The Department is an all-risk fire agency providing the people it protects with services that include fire suppression, pre-hospital BLS emergency medical, and initial hazardous material and technical rescue services. Given these risks, the Department utilizes a tiered response plan calling for different types and numbers of resources depending on incident or risk type. The DCC CAD system selects and dispatches the most appropriate resource types pursuant to the Department's response plan, as shown in the following table.

[5] Source: NFPA 1710 – Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments (2020 Edition).

Table 5—Response Plan by Incident Type

Incident Type	Resources Dispatched	Minimum Personnel
Low Acuity EMS	1 Ambulance	**2**
Critical EMS Incident	1 Engine, 1 Ambulance	**4**
Vehicle Collision	1 Engine, 1 Ambulance	**4**
Vehicle Collision w/Extrication	2 Engines, 1 Ambulance	**6**
Vehicle Fire	1 Engine, 1 Ambulance	**4**
Building Fire	2 Engines, 2 Ladder Trucks, 1 Ambulance, 1 Chief Officer	**8**
Vegetation Fire	1 Engine, 1 Ambulance	**4**
Water Incident	1 Rescue, 1 Boat, 1 Engine, 1 Chief Officer	**6**
Hazardous Material Release	1 Engine, 1 Ambulance	**4**
Technical Rescue	2 Engines, 2 Ambulances, 1 Chief Officer	**8**

Finding #5: The Department has a standard response plan that considers risk and establishes an appropriate initial response for each incident type; each type of call for service receives the combination of engines, ladder trucks, specialty units, and command officers customarily needed to effectively control the type of incident based on Department experience.

2.3 Outcome Expectations

SOC Element 2 of 8
Community Outcome Expectations

The SOC process begins by reviewing existing emergency services outcome expectations. This includes determining for what purpose the response system exists and whether the governing body has adopted any response performance measures. If it has, the time measures used must be understood and sound data must be available to evaluate performance.

Current national best practice is to measure percent completion of a goal (e.g., 90 percent of responses) instead of utilizing an average measure. Mathematically, this is called a fractile

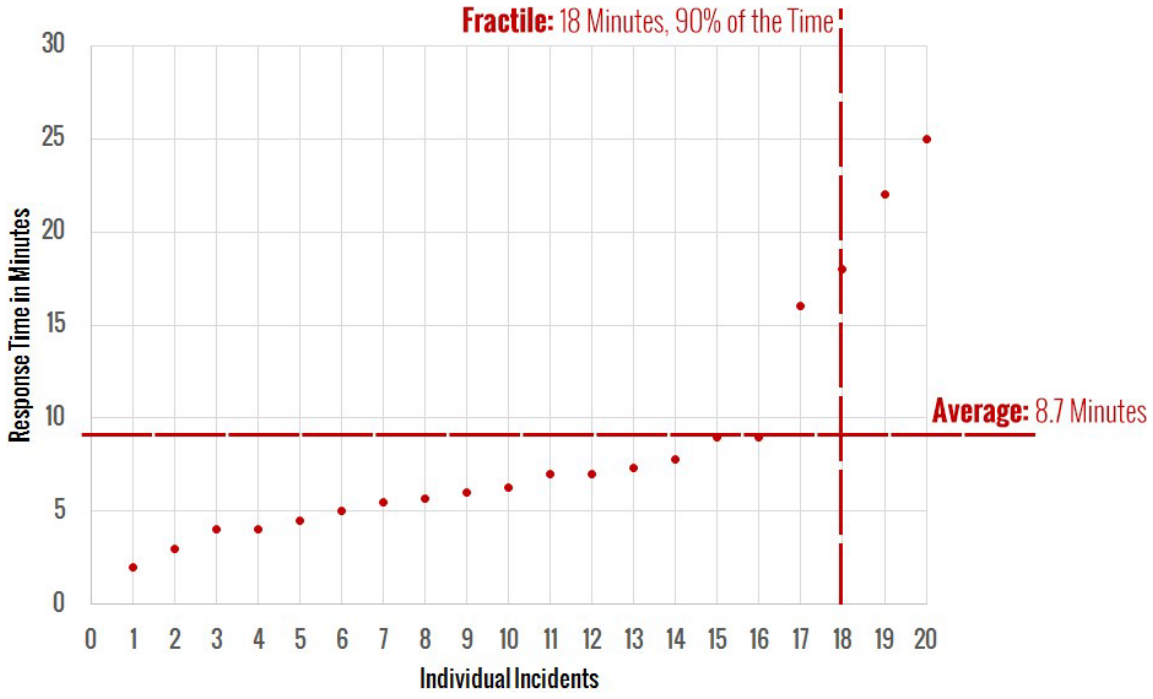
measure.[6] Measuring the average only identifies the central or middle point of response time performance for all calls for service in the data set. Using an average makes it impossible to know how many incidents had response times that were far above or just above the average.

For example, the following figure shows response times for a fictitious fire department. This small agency receives 20 calls for service each month, and each response time has been plotted on the following graph from shortest response time to longest response time.

The graph shows the average response time is 8.7 minutes. However, the average response time fails to properly account for four calls for service with response times far exceeding a threshold in which positive outcomes could be expected. In fact, it is evident in that 20 percent of responses are far too slow and that this jurisdiction has a potential life-threatening service delivery problem. Average response time as a measurement tool for fire services is simply not sufficient. This is a significant issue in larger cities if hundreds or thousands of calls are answered far beyond the average point.

By using the fractile measurement with 90 percent of responses in mind, this small example jurisdiction has a response time of 18:00 minutes, 90 percent of the time. This fractile measurement is far more accurate at reflecting the service delivery situation of this small fictitious agency.

Figure 2—Fractile versus Average Response Time Measurements



[6] A *fractile* is that point below which a stated fraction of the values lie. The fraction is often given in percent; the term percentile may then be used.

More importantly, within the SOC process, positive outcomes are the goal. From that goal, crew size and response time can be calculated to allow appropriate fire station spacing (distribution and concentration). Emergency medical incidents include situations with the most severe time constraints. The human brain can only survive 4:00 to 6:00 minutes without oxygen. Cardiac arrest and other events can cause oxygen deprivation to the brain. While cardiac arrests make up a small percentage, drowning, choking, trauma constrictions, or other similar events have the same effect. In a building fire, a small incipient fire can grow to involve the entire room in a 6:00- to 8:00-minute time frame. If fire service response is to achieve positive outcomes in severe emergency medical situations and incipient fire situations, *all* responding crews must arrive, assess the situation, and deploy effective measures before brain death occurs or the fire spreads beyond the room of origin.

Thus, from the time the 9-1-1 call is received by the dispatch center, an effective deployment system is *beginning* to manage the problem within a 7:00- to 8:00-minute total response time. This is right at the point that brain death is becoming irreversible, and the fire has grown to the point of leaving the room of origin and becoming very serious. Thus, the Department needs a first-due response goal that is within a range to give hope for a positive outcome. It is important to note that the fire or medical emergency continues to deteriorate from the time of inception, not from the time the fire engine starts to drive the response route. Ideally, the emergency is noticed immediately, and the 9-1-1 system is activated promptly. In the best of circumstances, this step of awareness—calling 9-1-1 and giving the dispatcher accurate information—takes 1:00 minute. Crew notification and travel time take additional minutes. Upon arrival, the crew must approach the injured party or emergency, assess the situation, and appropriately deploy its skills and tools. Even in easy-to-access situations, this step can take 2:00 minutes or more. This time frame may be increased considerably due to long driveways, apartment buildings with limited access, multiple-story buildings or office complexes, or shopping centers.

Unfortunately, there are times when the emergency has become too severe, even before the 9-1-1 notification or fire department response, for the responding crew to reverse; however, when an appropriate response time policy is combined with a well-designed deployment system, then only anomalies like bad weather, poor traffic conditions, or multiple emergencies slow down the response system. Consequently, a properly designed system will give the public hope of a positive outcome for their tax dollar expenditure.

For this report, total response time is the sum of 9-1-1 call processing / dispatch, crew turnout, and travel time, which is consistent with CFAI and NFPA best practice recommendations.

2.4 COMMUNITY RISK ASSESSMENT

SOC ELEMENT 3 OF 8
COMMUNITY RISK ASSESSMENT

The third element of the SOC process is a community risk assessment. Within the context of an SOC study, the objectives of a community risk assessment are to:

- Identify the values at risk to be protected within the community or service area.
- Identify the specific hazards with the potential to adversely impact the community or service area.
- Quantify the overall risk associated with each hazard.
- Establish a foundation for current/future deployment decisions and risk-reduction / hazard-mitigation planning and evaluation.

A hazard is broadly defined as a situation or condition that can cause or contribute to harm. Examples include fire, medical emergency, vehicle collision, earthquake, flood, etc. Risk is broadly defined as the *probability of hazard occurrence* in combination with the *likely severity* of *resultant impacts* to people, property, and the community.

2.4.1 Risk Assessment Methodology

The methodology employed by Citygate to assess community risks as an integral element of an SOC study incorporates the following elements:

- Identification of geographic planning sub-zones (risk planning zones) appropriate to the community or jurisdiction.
- Identification and quantification, to the extent data is available, of the values at risk to various hazards within the community or service area.
- Identification of the fire and non-fire hazards likely to impact the community or service area relative to services provided by the fire agency.
- Determination of the probability of occurrence for each identified hazard based on prior historical occurrences.
- Determination of *likely* impact severity of a hazard occurrence by type and risk planning zone.
- Determination of overall risk by hazard and risk planning zone.

2.4.2 Values at Risk to Be Protected

Broadly defined, *values at risk* are those tangibles of significant importance or value to the community or jurisdiction that are potentially at risk of harm or damage from a hazard occurrence. Values at risk typically include people, critical facilities/infrastructure, buildings, and key economic, cultural, historic, and natural resources.

People

Residents, employees, visitors, and travelers through a community or jurisdiction are vulnerable to harm from a hazard occurrence. Particularly vulnerable are specific at-risk populations, including those unable to care for themselves or self-evacuate in the event of an emergency. Key demographic data for the Department's service area includes:

- Slightly more than 31 percent of the population is under 10 years or over 65 years of age.
- Of the population over 24 years of age, almost 94 percent has completed high school or equivalency.
- Of the population over 24 years of age, nearly 33 percent has an undergraduate degree, and slightly more than 10 percent has a graduate or professional degree.
- Of the population 15 years of age or older, more than 93 percent is in the workforce; of those, nearly 7 percent are unemployed.
- Median household income is nearly $69,000.
- The population below the federal poverty level is slightly more than 11 percent.
- Nearly 7 percent of the population does not have health insurance coverage.

Critical Infrastructure / Key Resources

The U.S. Department of Homeland Security defines critical infrastructure and key resources (CIKR) as those physical assets essential to the public health and safety, economic vitality, and resilience of a community, such as lifeline utilities infrastructure, telecommunications infrastructure, essential government services facilities, public safety facilities, schools, hospitals, airports, etc. The two cities have numerous critical facilities, and a hazard occurrence with significant impact severity affecting one or more of these facilities would likely adversely impact critical public or community services.

Buildings

The service area includes nearly 19,000 residential housing units, and approximately 1,280 businesses, including offices, professional services, retail sales, restaurants/bars, motels, churches, schools, government facilities, healthcare facilities, and other business types as described in **Appendix A**.

2.4.3 Hazard Identification

Citygate utilized prior risk studies where available, fire and non-fire hazards as identified by the CFAI, and agency/jurisdiction-specific data and information to identify the hazards to be evaluated for this study.

Following an evaluation of the hazards identified in the 2021 Dakota County All Hazard Mitigation Plan,[7] and the fire and non-fire hazards as identified by the CFAI as they relate to services provided by the Department, Citygate evaluated the following six hazards for this assessment:

- Building fire
- Vegetation/wildland fire
- Medical emergency
- Hazardous material release/spill
- Technical rescue
- Marine Incident

Because building fires and medical emergencies have the most severe time constraints if positive outcomes are to be achieved, the following is a brief overview of building fire and medical emergency risk. **Appendix A** contains the full risk assessment for all seven hazards.

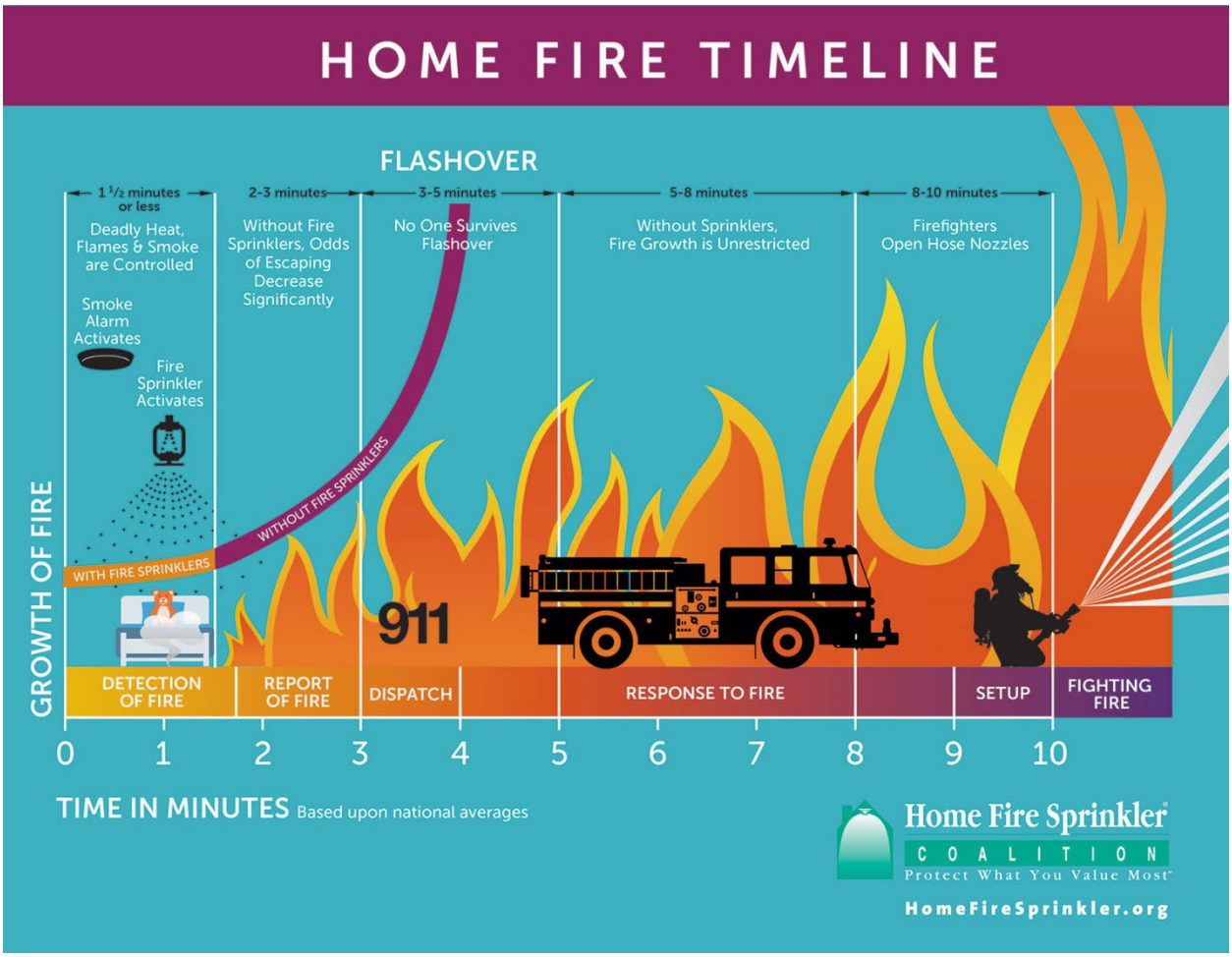
Building Fire Risk

One of the primary hazards in any community is building fire. Building fire risk factors include building density, size, age, occupancy, and construction materials and methods, as well as the number of stories, the required fire flow, the proximity to other buildings, built-in fire protection/alarm systems, an available fire suppression water supply, building fire service capacity, fire suppression resource deployment (distribution/concentration), staffing, and response time.

[7] Source: Dakota County 2021 All Hazard Mitigation Plan Table 4.1 Hazards Profiled.

The following figure illustrates the building fire progression timeline and shows that flashover, which is the point at which the entire room erupts into fire after all the combustible objects in that room reach their ignition temperature, can occur as early as 3:00 to 5:00 minutes from the initial ignition. Human survival in a room after flashover is extremely improbable.

Figure 3—Building Fire Progression Timeline

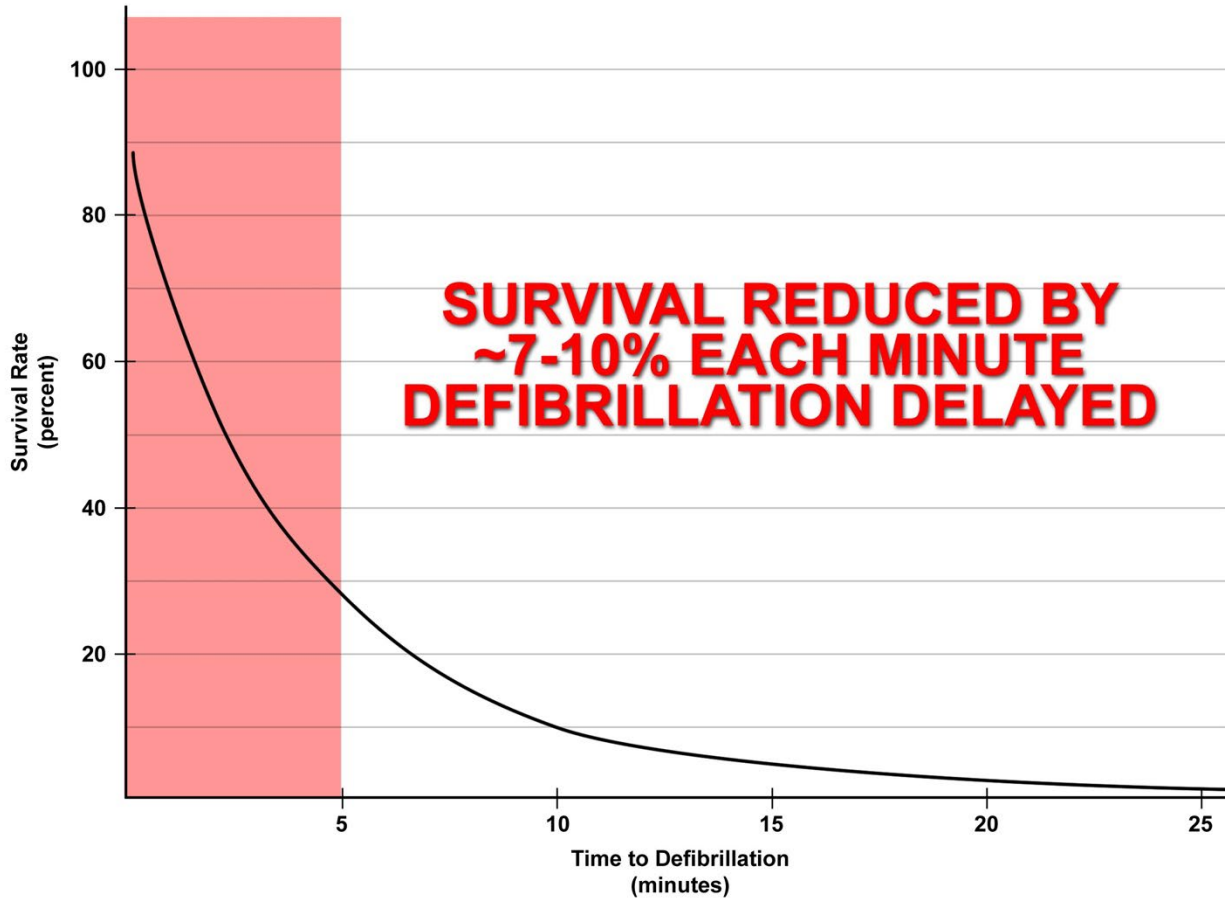


Source: http://www.firesprinklerassoc.org

Medical Emergency Risk

Fire agency service demand in most jurisdictions is predominantly for medical emergencies. The following figure illustrates the reduced survivability of a cardiac arrest victim as time to defibrillation increases.

Figure 4—Survival Rate versus Time of Defibrillation



The Department currently provides BLS pre-hospital emergency medical services, with operational personnel trained to the EMT-A level.

2.4.4 Risk Assessment Summary

The City's overall risk for six hazards related to emergency services provided by the Department range from **Low** to **High**, as summarized in the following table. See **Appendix A** for the full risk assessment.

Table 6—Overall Risk by Hazard

Hazard	Planning Zone	
	Station 1	Station 2
Building Fire	*Moderate*	*Moderate*
Vegetation/Wildland Fire	*Low*	*Low*
Medical Emergency	*High*	*High*
Hazardous Materials	*Moderate*	*Moderate*
Technical Rescue	*Low*	*Low*
Marine Incident	*Low*	*Low*

2.5 Critical Task Time Measures—What Must Be Done over What Time Frame to Achieve the Stated Outcome Expectation?

SOC Element 4 of 8
Critical Task Time Study

SOC studies use critical task information to determine the number of firefighters needed within a time frame to achieve desired objectives for fire and emergency medical incidents. Table 7 and Table 8 illustrate critical tasks typical of building fire and medical emergency incidents, including the minimum number of personnel required to complete each task. These tables are composites from Citygate clients in urban/suburban departments, with units staffed with three or four personnel per engine or ladder truck. It is important to understand the following relative to these tables:

- It can take a considerable amount of time after a task is ordered by command to complete the task and achieve the desired outcome.
- Task completion time is usually a function of the number of personnel that are *simultaneously* available. The fewer firefighters available, the longer some tasks will take to complete. Conversely, with more firefighters available, some tasks are completed concurrently.
- Some tasks must be conducted by a minimum of two firefighters to comply with safety regulations. For example, two firefighters are required to search a smoke-filled room for a victim.

2.5.1 Critical Firefighting Tasks

Table 7 illustrates the critical tasks required to control a typical single-family dwelling fire with six response units (two engines, two ladder trucks, one ambulance, and one chief officer, all from South Metro for a total ERF of 8–13 personnel depending on daily staffing level). These tasks are

taken from typical fire departments' operational procedures, which are consistent with the customary findings of other agencies using the SOC process. No conditions exist to override the Occupational Safety and Health Administration (OSHA) two-in/two-out safety policy, which requires that firefighters enter atmospheres such as building fires that are immediately dangerous to life and health in teams of two, while two more firefighters are outside and immediately ready to rescue them should trouble arise.

Scenario: *Simulated approximately 2,000 square-foot, two-story, single-family residential fire with unknown rescue situation. Responding companies receive dispatch information typical for a witnessed fire. Upon arrival, they find approximately 50 percent of the second floor involved in fire.*

Table 7—First Alarm Residential Fire Critical Tasks – 11–13 Personnel

Critical Task Description		Personnel Required
First-Due Engine (2–4 Personnel)		
1	Conditions report	1
2	Establish supply line to hydrant	2
3	Deploy initial fire attack line to point of building access	2
4	Operate pump and charge attack line	1
5	Establish incident command	1
First-Due Truck (2 Personnel)		
1	Conduct primary search	2
2	Deploy ground ladders to roof and upper story windows	2
3	Establish horizontal or vertical building ventilation	2
Second-Due Engine (2–4 Personnel)		
1	Conduct initial search and rescue, if not already completed	2
2	Shut off utilities	1-2
3	Deploy back-up attack line	2
4	Establish Initial Rapid Intervention Crew (IRIC)	2
Second-Due Truck (2 Personnel) if at Max Staffing or via Mutual Aid		
1	Open concealed spaces as required	2
2	Support other companies as assigned	1-2
Chief Officer (limited availability with current model)		
1	Transfer of incident command	1
2	Establish exterior command and scene safety	1
Ambulance (2 Personnel)		
1	Establish Rehab	1–2
2	Support other companies as assigned	1–2

Grouped together, these tasks form an Effective Response Force (ERF), or First Alarm Assignment. These distinct tasks must be performed to effectively achieve the desired outcome; arriving on-scene does not stop the emergency from escalating. While firefighters accomplish these tasks, the incident progression clock keeps running.

Many studies have shown that a small fire can spread to engulf an entire room in fewer than 4:00 to 5:00 minutes after free burning has started. Once the room is completely superheated and involved in fire (known as flashover), the fire will spread quickly—both vertically and

horizontally—throughout the structure. For this reason, it is imperative that fire suppression and search/rescue operations commence before the flashover point occurs if the goal is to keep fire damage in or near the room of origin and to rescue persons unable to self-evacuate. In addition, flashover presents a life-threatening situation to both firefighters and any occupants of the building. Fire fatalities typically include persons under 10 and over 65 years of age and those unable to self-evacuate, with slightly more than 31 percent of the service area population within those age groups.

2.5.2 Critical Medical Emergency Tasks

The Department responds to more than 5,800 EMS incidents annually, including vehicle accidents, strokes, heart attacks, difficulty breathing, falls, childbirths, and other medical emergencies.

For comparison, the following table summarizes the critical tasks required for a cardiac arrest patient.

Table 8—Cardiac Arrest Critical Tasks – One Engine + One Ambulance (4-6 Personnel)

Critical Task		Personnel Required	Critical Task Description
1	Chest compressions	1–2	Compression of chest to circulate blood
2	Ventilate/oxygenate	1–2	Mouth-to-mouth, bag-valve-mask, apply O_2
3	Airway control	1–2	Manual techniques/intubation/cricothyroidotomy
4	Defibrillate	1–2	Electrical defibrillation of dysrhythmia
5	Establish I.V.	1–2	Peripheral or central intravenous access
6	Control hemorrhage	1–2	Direct pressure, pressure bandage, tourniquet
7	Splint fractures	2–3	Manual, board splint, HARE traction, spine
8	Interpret ECG	2	Identify type and treat dysrhythmia
9	Administer drugs	2	Administer appropriate pharmacological agents
10	Spinal immobilization	2–3	Prevent or limit paralysis to extremities
11	Extricate patient	3	Remove patient from vehicle entrapment
12	Patient charting	1–2	Record vitals, treatments administered, etc.
13	Hospital communication	1–2	Receive treatment orders from physician
14	Treat en route to hospital	2–3	Continue to treat/monitor/transport patient

2.5.3 Critical Task Analysis and Effective Response Force Size

What does a deployment study derive from a critical task analysis? The time required to complete the critical tasks necessary to stop the escalation of an emergency (as shown in Table 7 and Table 8) must be compared to outcomes. As stated, after approximately 3:00 to 5:00 minutes of free

burning in an enclosed room, fire will escalate to the point of flashover. At this point, the entire room is engulfed in fire, the entire building becomes threatened, and human survival near or in the room of a fire's origin becomes impossible. Additionally, brain death begins to occur within 4:00 to 6:00 minutes of the heart stopping. Thus, the ERF must arrive in time to prevent these emergency events from becoming worse.

The Department's daily on-duty response staffing is only sufficient to deliver an ERF of two engines, two ladder trucks, one ambulance, and one chief officer totaling 12–13 personnel to a medium-or high hazard building fire, if all the authorized personnel are on duty. If the minimum staffing of 8 plus one chief officer (if available) has to respond, a total of 9 personnel is *insufficient* for a serious house fire. Or if the ambulance crews are committed to EMS incidents at peak hours of the day, a maximum of 12 on duty falls to 8. The Department augments its multiple-unit responses as needed by requesting a second engine or ladder truck with two or more personnel via mutual aid. However, two of the three closest departments' staffs—with a mix of career and paid-on-call firefighters and the closest units—do not respond as quickly to the Northern part of the response area as the City of St. Paul could.

Mitigating an emergency event is a team effort once the units have arrived. This refers to the *weight* of response analogy: if too few personnel arrive too slowly, the emergency will escalate instead of improving. The outcome times, of course, will be longer and yield less-desirable results if the arriving force is later or smaller.

The number of personnel and the arrival timeframe can be critical in a serious fire. Fires in older or multiple-story buildings could require the initial firefighters to rescue trapped or immobile occupants. If the ERF is too small, rescue and fire suppression tasks *cannot* be conducted simultaneously. Thus, achieving good performance requires *adequate staffing* (and training).

Fires and complex medical incidents require additional units to arrive in time to complete an effective intervention. Time is one factor that comes from *proper station placement and the staffing model used*. When fire stations are spaced too far apart and one unit must cover another unit's area or multiple units are needed, the units can be too far away, and the emergency will escalate and result in a less-than-desirable outcome. Thus, some overlapping coverage between fire stations is needed.

Previous critical task studies conducted by Citygate and NFPA Standard 1710 identify that all units need to arrive at a building fire with a minimum of **16-17** firefighters within 11:30 minutes (from the time of a 9-1-1 call) to *simultaneously and effectively* perform the tasks of rescue, fire suppression, and ventilation.

If fewer firefighters arrive, all tasks may not be completed. Most likely, the search team would be delayed, as would ventilation. The attack lines would only consist of two firefighters, which does not allow for rapid movement of the hose line above the first floor in a multiple-story building. Because rescue is conducted with at least two two-person teams, when rescue is essential, other

tasks are not completed in a simultaneous, timely manner. Therefore, effective deployment is about the **speed** *(travel time)* and the **weight** *(number of firefighters)* of the response.

The fact that the Department's 90th percentile ERF call-to-arrival performance over the three years of data for a moderate to serious incident was11:31 to 14:35 minutes, which is past a best practices recommendation of 11:30 minutes. The Department's plan for building fires does reflect a commitment to confining building fires to the building of origin and prevent the spread of fire to adjoining buildings if the "weight of attack" can respond promptly.

2.6 Distribution and Concentration Studies—How the Location of First-Due and First Alarm Resources Affects Emergency Incident Outcomes

SOC Element 5 of 8
Distribution Study

SOC Element 6 of 8
Concentration Study

The joint service area is currently served by two fire stations staffed 24 hours a day with at least eight full-time personnel plus one chief officer when available for incident command. More serious incidents rely on response from adjoining agencies via mutual aid.

When using geographic mapping tools, it is appropriate to understand what the existing stations do and do not cover within travel time goals; if there are any coverage gaps needing one or more stations; and what, if anything, to do about them.

In brief, there are two geographic perspectives to fire station deployment:

- **Distribution** – the spacing of first-due fire units to control routine emergencies before they escalate and require additional resources.
- **Concentration** – the spacing of fire stations sufficiently close to each other so that more complex emergency incidents can quickly receive sufficient resources from multiple fire stations. As indicated, this is known as the Effective Response Force (ERF) or, more commonly, the First Alarm Assignment—the collection of a sufficient number of firefighters on-scene, delivered within the concentration time goal to stop the escalation of the problem.

To analyze first-due fire unit travel time coverage, Citygate used a geographic mapping tool that measures theoretical travel time over a street network. For this calculation, Citygate used the base map and street travel speeds calibrated to actual fire apparatus travel times from previous responses to simulate real-world travel time coverage. Using these tools, Citygate ran several deployment tests and measured their impact on various parts of the Cities. A 4:00-minute first-due and 8:00-minute ERF *travel* time were used, consistent with best practice response performance goals for positive outcomes in urban areas.

2.6.1 Deployment Baselines

Map #1 – General Geography, Station Locations, and Response Resource Types

Map #1 shows the Department's service area boundaries and the two fire station locations. This is a reference map for other maps that follow. Station symbols denote the types of response apparatus available at each station.

Map #2 – Risk Assessment: Planning Zones

Map #2 shows the two risk planning zones used for this study, as recommended by the CFAI, which are the same as each station's initial (first-due) response area.

Map #2a – Risk Assessment: Population Density

This map shows the resident population density across the two cities. People drive EMS incident demand; thus, the higher population density areas are typically the higher EMS demand locations. The highest population density areas are northern West St. Paul and central to southwest South St. Paul.

Map #2b – 4:00-Minute and 5:00-Minute Travel Time Coverage over Population Density

Map #2b shows the two stations coverage of public road segments, over population density, that a fire engine should be expected to reach within 4:00 or 5:00-minutes of *travel time* assuming the respective engine is in station and encounters no traffic congestion. As can be seen, some of northern West St. Paul is beyond 4:00- or even 5:00-minutes of travel time from the existing station. Similarly, some of the northern and southern areas of South St. Paul are also not covered in 4:00 or 5:00 minutes travel time. In these areas of both cities, the longer travel times make it less probable that desired outcomes can be achieved. It should also be noted that neither station is central to the population density of *either* city.

The purpose of response time modeling is to determine response time coverage across a jurisdiction's geography and station locations. This geo-mapping design is then validated against dispatch time data to reflect actual response times. Ideally, there should be some overlap between station areas so that a second-due unit can have the chance of an acceptable response time when it responds to a call in a different station's first-due response area.

Map #3 – Distribution: 4:00-Minute First-Due Travel Time Coverage

This map shows in green the 63 percent of public road segments that can be expected to be reached by a fire engine within 4:00-minute travel time from the existing two fire stations. This is the essentially Map #2b without the population density and 5:00-minute coverage layers.

Map #3a – Distribution: 5:00-Minute First-Due Travel Time Coverage

This map shows the nearly 23 percent increase in coverage by adding just one minute to the travel time goal. As can be seen, even with two stations, the outer edges of both cities are still beyond the 5:00-minute coverage.

Map #3b – Distribution: 4:00 and 5:00-Minute First-Due Travel Time Coverage with Incidents Beyond the 4th and 5th Minute of Coverage

This map shows the incidents, not just the street segments, beyond the reach of both stations at both 4:00 minutes (green shaded areas) and 5:00 minutes of travel (brown shaded areas). As the map illustrates, there are many incidents in both cities beyond the 4:00-minute travel band, and in West St. Paul beyond the 5:00-minute band as well.

This perspective also shows that if the deployment model were to be modified to only a single station, much of southern South St. Paul would be beyond the 4th and 5th minute of travel.

Map #4 – Insurance Services Office (ISO) 1.5-Mile Coverage Areas

Map #4 displays the former ISO recommendation that urban stations cover a 1.5-mile *distance* response area. Depending on a jurisdiction's road network, the 1.5-mile measure usually equates to a 3:30- to 4:00-minute *travel*; however, just two fire stations only provide core area coverage. One station could not begin to cover both cities in best outcome response times.

Map #5 – Concentration: ERF 8:00-Minute Travel Time Coverage

Map #5 shows the public street segments where the Department's current response plan should deliver the initial ERF of two engines, one ladder truck, one ambulance, and one chief officer within 8:00 minutes travel time. A larger response force must be delivered via mutual aid in a longer travel time. As can be seen, this ERF coverage for more serious incidents only occurs between the two stations, and both the northwest and southeast corners are well beyond 8:00-minute travel time coverage for the last needed unit to arrive.

Map #6 – 8:00-Minute Ladder Truck Travel Time Coverage

Map #6 shows, in green, 8:00-minute travel time coverage for a ladder truck from either station. As can be seen, coverage extends to most built-up sections of the two cities within the desired 8:00-minute travel time goal. However, the two ladder trucks are cross-staffed with the ambulances and, if the ambulances are committed to EMS incidents, the ladder(s) will not be available to respond.

Map #7 – 8:00-Minute Chief Officer Travel

This map shows 8:00-minute travel time coverage for a chief officer from Station 1.

Map #8 – All Incident Locations

Map #8 shows the location of all incidents from July 1, 2020, through June 30, 2023. As can be seen, calls for service occur on nearly all street segments of the service area, even where population density if the lightest in south and east South S. Paul.

Map #9 – Emergency Medical Services and Rescue Incident Locations

Map #9 shows the emergency medical and rescue incident locations over the three-years studied. With most calls for service being EMS-related, this map illustrates the need for pre-hospital emergency medical services.

Map #10 – All Fire Locations

Map #10 shows the location of all fires within the cities over the three-year period. All fires include any type of fire call, from vehicle to dumpster to building. While there are obviously fewer fires than medical or rescue calls, this map illustrates that fires occur throughout the service area.

Map #11 – Building Fire Locations

Map #11 displays the location of all building fire incidents over the three-year study. While the number of building fires is a smaller subset of all fires, building fires do occur beyond the 4:00- and 5:00-minute first-due travel time coverage area, as shown in Maps #3 and #3a.

Map #12 – Emergency Medical Services and Rescue Incident Location Densities

Map #12 shows, by mathematical density, where clusters of EMS and rescue incident activity occurred over the three data years. The darker density color plots the highest concentration of EMS/rescue incidents. This type of map makes the location of frequent workload more meaningful than simply mapping the locations of all EMS/rescue incidents, as was shown in Map #9.

This perspective is important because the deployment system needs an overlap of units to ensure the delivery of multiple units when needed for more serious incidents or to handle simultaneous calls for service.

Map #13 – All Fire Location Densities

Map #13 is like Map #12 but shows the hot spots of activity for all types of fires. The density of these incidents is greater in the higher building and population density areas of both cities and the two fire stations are well positioned near the center of the higher density areas.

Map #14 – Structure Fire Location Densities

Map #14 is like Map #11 but shows the hot spot locations for structure fires only.

2.6.2 Travel Time Road Mile Coverage Measures

In addition to the visual displays of travel time coverage the maps provide, GIS software also calculates the miles of public streets covered at 4:00 and 8:00 minutes, as shown in the following table.

Table 9—Travel Time Coverage Summary

Map No.	Travel Time Measure	Total Public Road Miles	Miles Covered	Percent of Total Miles Covered
3	**4:00-Minute 1st-Due Engine**	175	**110**	**63.0%**
3a	**5:00-Minute 1st-Due Engine**	175	**150**	**85.7%**
4	**ISO 1.5-Mile Station Spacing**	175	**105**	**60.1%**
5	**8:00-Minute Overlapping Coverage from Sta. 1 and Sta. 2**	175	**109**	**62.3%**
6	**8:00-Minute Truck from Sta. 1 and Sta. 2**	175	**175**	**100.0%**
7	**8:00-Minute Chief Officer from Sta. 1**	175	**150**	**85.7%**

As the previous table shows, only 63 percent of the two cities public road network can be reached from the current two fire station locations within 4:00 minutes of travel time. This increases to 85.7 percent by the 5th minute which is very good coverage in a suburban density city with a low structure fire rate. The two stations combined can also cover only 62.3 percent of the service area at 8:00-minutes ERF travel.

2.6.3 Mapping Coverage Findings

Finding #6: The Department's current fire station locations can be expected to deliver 5:00-minute first-due travel time coverage to 85.7 percent of the service area's total public road miles, which is good coverage to achieve desired outcomes.

Finding #7: The service area is too large to cover from either current station location even at the 5th minute of travel, leaving large areas of the other City well beyond 5:00-minute coverage.

2.7 Statistical Analysis

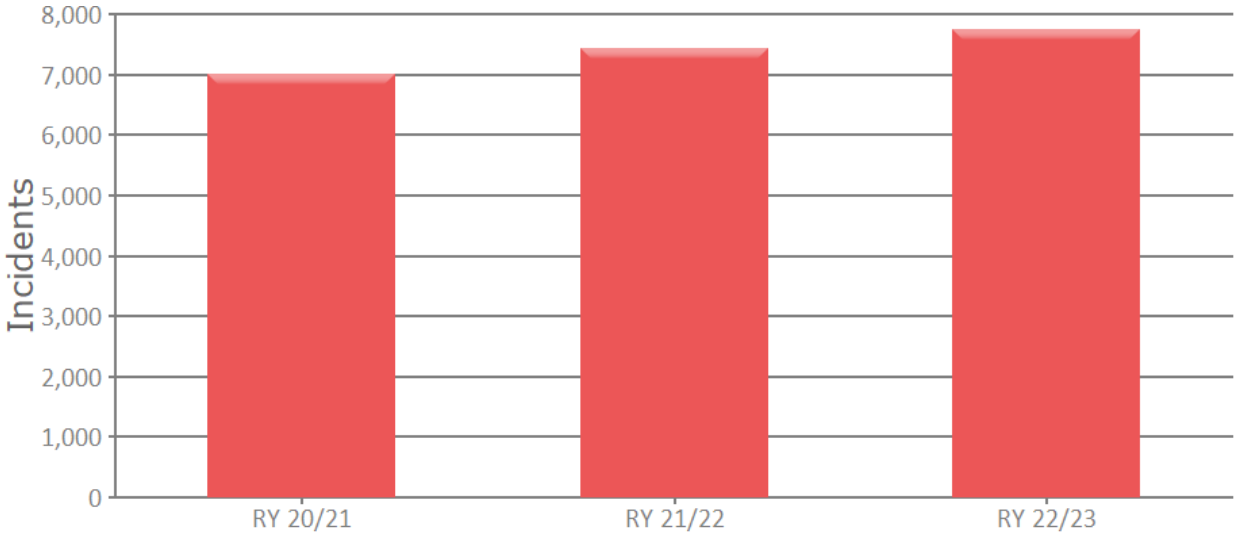
SOC Element 7 of 8
Reliability and Historical Response Effectiveness Studies

The maps described in **Section 2.6** and presented in **Volume 2** show the ideal situation for response times and the response effectiveness given perfect conditions with no competing calls, units out of place, or simultaneous calls for service. Examination of the actual response time data provides a picture of actual response performance with simultaneous calls, rush hour traffic congestion, units out of position, and delayed travel time for events such as periods of severe weather. The following subsections provide summary statistical information regarding the Department and its services.

2.7.1 Demand for Service

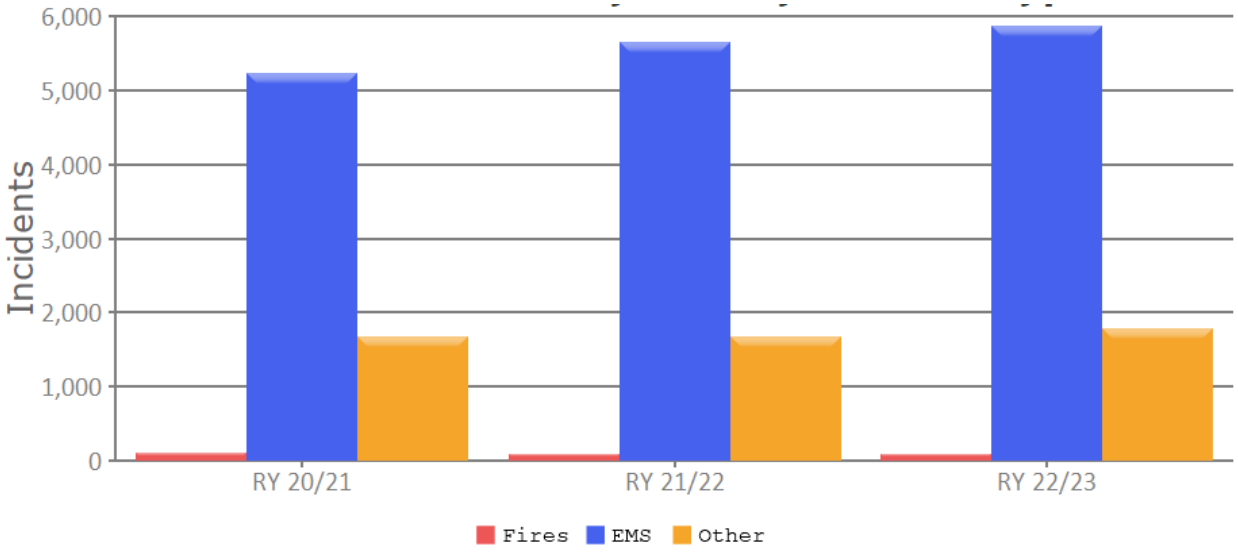
The Department provided both National Fire Incident Record system (NFIRS) 5 incident and dispatch computer apparatus response time data for the period from July 1, 2020, through June 30, 2023. These two data sets were merged to provide 22,182 incidents and 28,338 apparatus response records. The following figure shows overall service demand increased 10.5 percent over the three-years studied.

Figure 5—Service Demand by Year



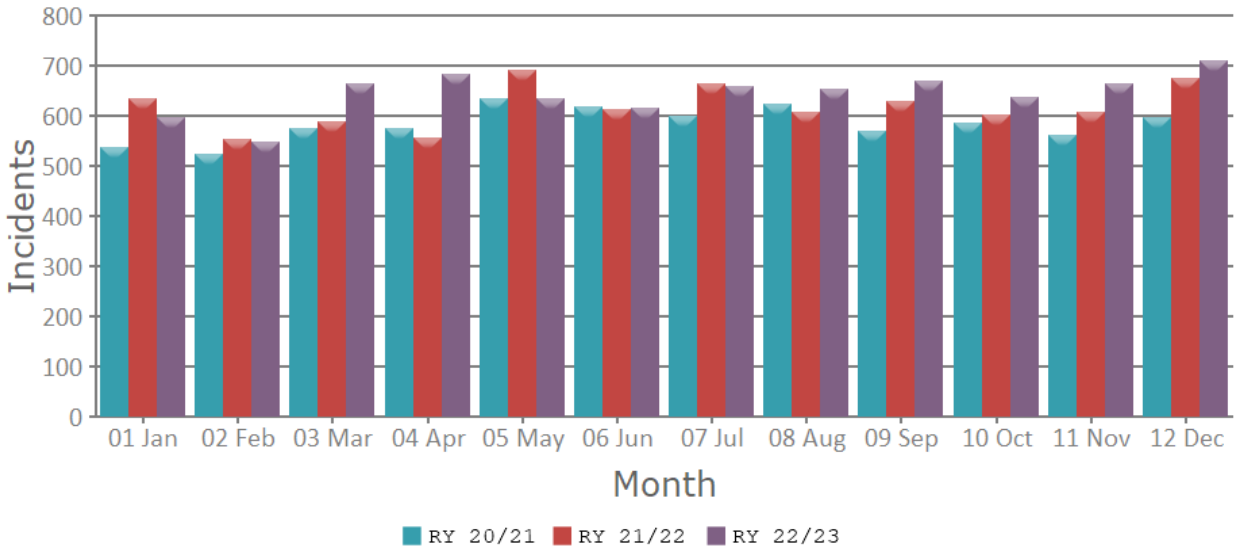
The following figure illustrates annual service demand by incident type with EMS incidents increasing steadily and fire and other incident types remaining fairly constant over the three-year period.

Figure 6—Annual Service Demand by Incident Type



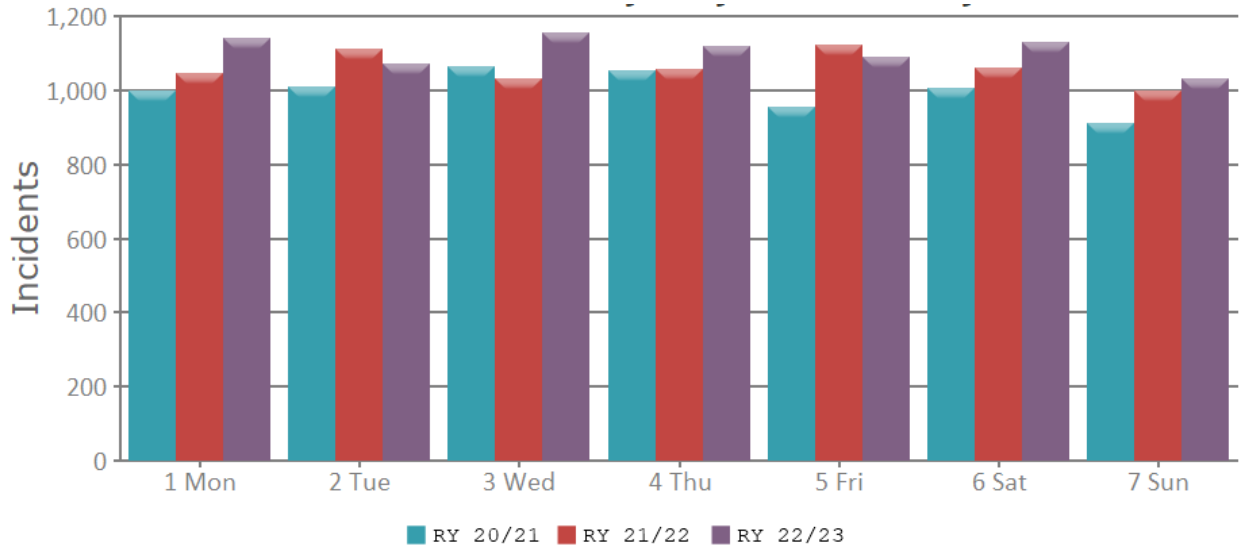
The following figure illustrates fairly consistent incident demand by month and year.

Figure 7—Service Demand by Month and Year



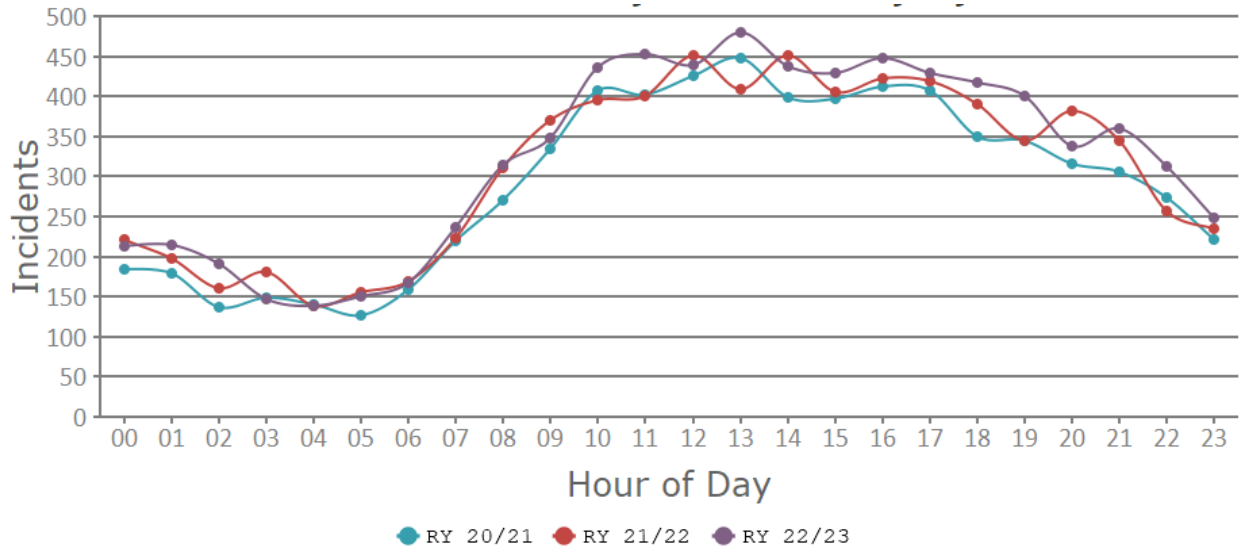
The following illustrates service demand by day of week, showing minimal variation.

Figure 8—Service Demand by Day of Week



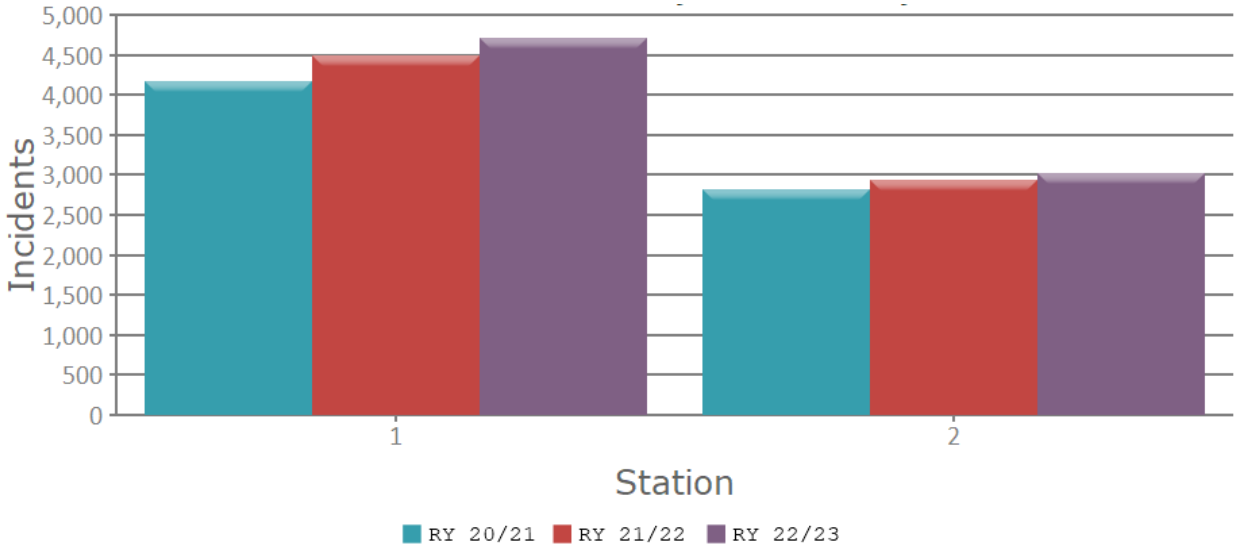
The following figure shows service demand by hour of day with hourly activity fairly consistently distributed year to year.

Figure 9—Service Demand by Hour of Day and Year



The following graph is a breakdown of the number of incidents by station area by year with activity in both station areas increasing slightly each year.

Figure 10—Service Demand by Station by Year



The following table ranks service demand by incident type for those with more than 12 occurrences in RY 22/23. Note the high ranking of EMS-related incidents and incidents cancelled en route. Building fires rank 16th by volume.

Table 10—Service Demand by Incident Type (RY 2022/23)

Incident Type	RY 22/23
321 EMS call, excluding vehicle accident with injury	5,689
554 Assist invalid	426
611 Dispatched & canceled en route	197
552 Police matter	145
745 Alarm system sounded, no fire – unintentional	140
322 Vehicle accident with injuries	108
622 No incident found on arrival of incident address	101
251 Excessive heat, scorch burns with no ignition	68
444 Power line down	68
743 Smoke detector activation, no fire – unintentional	48
561 Unauthorized burning	47
735 Alarm system sounded due to malfunction	43
412 Gas leak (natural gas or LPG)	38
324 Motor vehicle accident no injuries	37
651 Smoke scare, odor of smoke	37
111 Building fire	**31**
553 Public service	30
445 Arcing, shorted electrical equipment	30
551 Assist police or another governmental agency	29
671 Hazmat release investigation w/ no hazmat	29
733 Smoke detector activation due to malfunction	27
424 Carbon monoxide incident	27
715 Local alarm system, malicious false alarm	22
746 Carbon monoxide detector activation, no CO	21
736 CO detector activation due to malfunction	20
550 Public service assistance, other	19
600 Good intent call, other	16
353 Removal of victim(s) from stalled elevator	14

The following table ranks service demand by property use type for those with more than 25 occurrences in RY 2022/23. Note the high rankings of residential dwellings, streets, and highways.

Table 11—Service Demand by Property Use

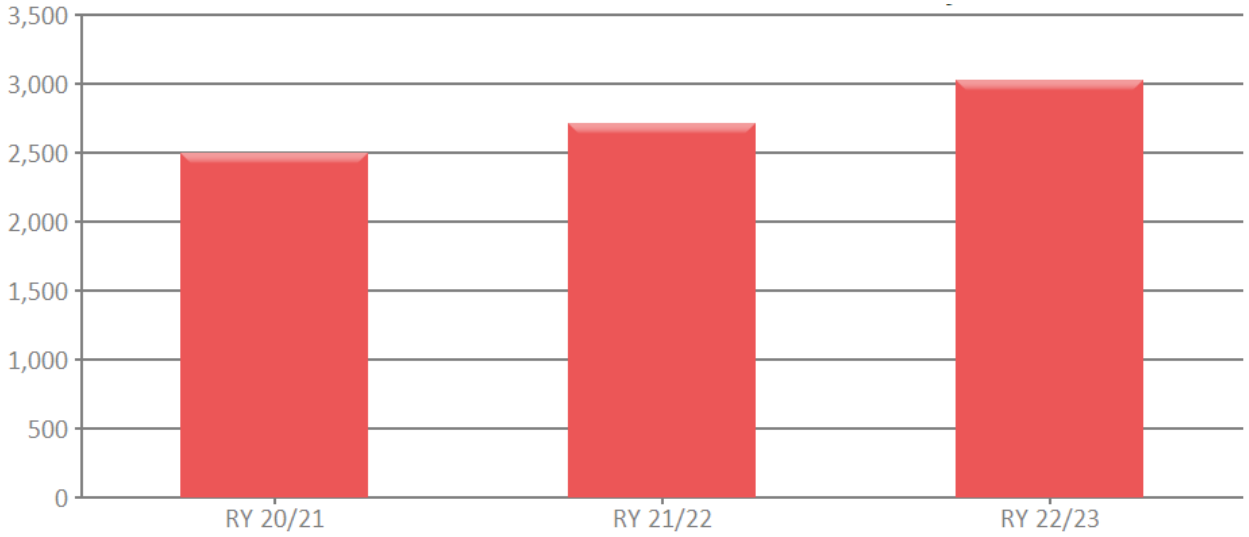
Property Use	RY 22/23
429 Multifamily dwellings	2,800
419 1 or 2 family dwelling	2,263
311 24-hour care Nursing homes, 4 or more persons	1,038
962 Residential street, road or residential driveway	243
963 Street or road in commercial area	129
340 Clinics, Doctors offices, hemodialysis centers	107
961 Highway or divided highway	89
459 Residential board and care	78
965 Vehicle parking area	60
161 Restaurant or cafeteria	58
150 Public or government, other	54
500 Mercantile, business, other	46
960 Street, other	41
519 Food and beverage sales, grocery store	39
581 Department or discount store	29
571 Service station, gas station	25
580 General retail, other	25

2.7.2 Simultaneous Incident Activity

Simultaneous incidents occur when other incidents are underway at the time a new incident begins. During RY 22/23, 39.12 percent of the Departments incidents occurred while one or more other incidents were underway. The following is the percentage of simultaneous incidents broken down by number of simultaneous incidents.

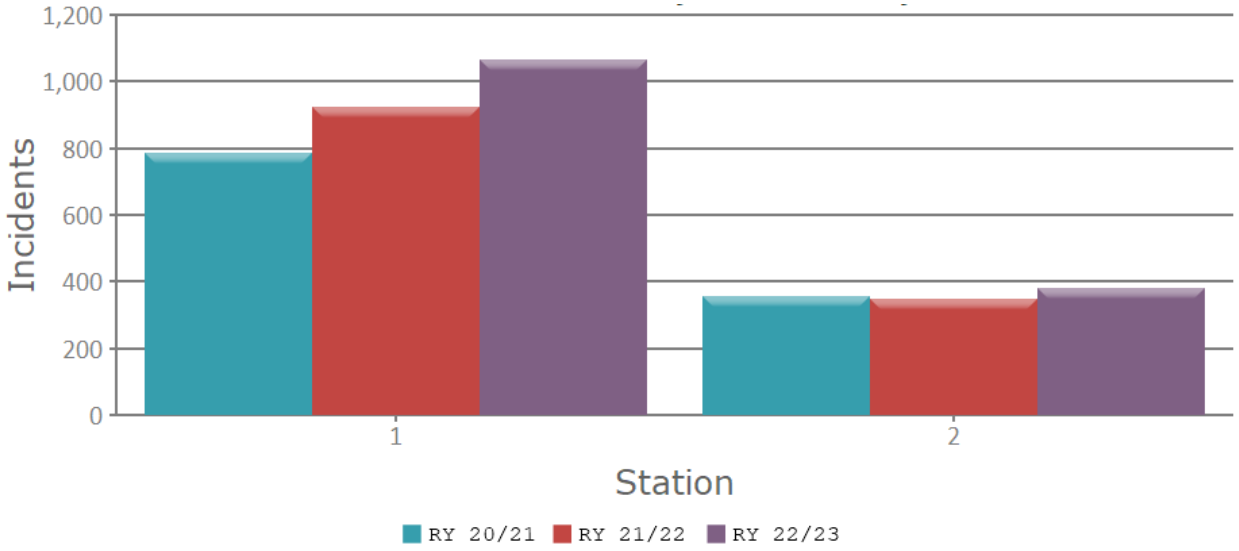
- 39.12 percent for 2 or more simultaneous incidents.
- 09.83 percent for 3 or more simultaneous incidents.
- 01.73 percent for 4 or more simultaneous incidents.

Figure 11—Simultaneous Incident Activity by Year



In larger jurisdictions, simultaneous incidents in different station areas have very little operational consequence. However, when simultaneous incidents occur within a single station area there can be significant delays in response times. The following figure illustrates the number of single-station simultaneous incidents by station area by reporting year. Station 1 has the greatest number of single-station area simultaneous incidents.

Figure 12—Single-Station Simultaneous Incidents by Station and Year



Finding #8:	Two simultaneous calls for service occur 39 percent of the time in 22/23.
Finding #9:	Simultaneous incidents are increasing annually in Station 1's response area.
Finding #10:	Simultaneous incidents predominantly draw Station 2 west to the middle of the shared service area.

2.7.3 Station Workload Demand

The following table summarizes station response area workload by hour of day for reporting year 2022/2023. The percentage shown is the percent probability of a station area having an active incident during that hour of day. The percentage considers both the number and the duration of incidents. Station 1's response area had the highest workload over most hours of the day.

Table 12—Station-Hour-Demand (RY 2022/23)

Hour of Day	Sta. 1	Sta. 2
00:00	15.77%	11.32%
01:00	14.65%	12.98%
02:00	15.49%	10.94%
03:00	12.39%	7.22%
04:00	11.43%	7.35%
05:00	12.67%	7.70%
06:00	14.18%	7.54%
07:00	20.28%	10.53%
08:00	30.22%	14.20%
09:00	28.32%	17.39%
10:00	35.02%	23.84%
11:00	39.66%	22.78%
12:00	39.45%	20.52%
13:00	42.64%	22.64%
14:00	39.46%	21.22%
15:00	38.23%	23.20%
16:00	38.36%	21.05%
17:00	33.62%	21.09%
18:00	30.09%	20.57%
19:00	29.67%	24.18%
20:00	29.32%	16.61%
21:00	25.43%	19.43%
22:00	23.94%	17.57%
23:00	20.44%	13.02%

2.7.4 Unit-Hour Utilization

The unit-hour utilization (UHU) percentage for apparatus is calculated by two primary factors: the number of responses and duration of responses. The following table is a UHU summary for South Metro engine and ladder companies. The busiest companies are listed first.

Table 13—Unit-Hour Utilization – Engines

Hour of Day	Engine 1	Engine 2	Ladder 2
00:00	3.21%	3.13%	0.66%
01:00	2.69%	2.70%	0.26%
02:00	2.48%	3.77%	1.13%
03:00	3.65%	2.94%	1.35%
04:00	1.71%	1.51%	0.73%
05:00	2.69%	2.18%	0.14%
06:00	2.90%	1.79%	0.44%
07:00	4.27%	3.22%	0.99%
08:00	5.51%	3.21%	0.27%
09:00	4.33%	4.46%	0.34%
10:00	4.91%	6.46%	1.06%
11:00	6.50%	4.14%	0.48%
12:00	6.89%	5.05%	0.67%
13:00	6.66%	6.07%	1.61%
14:00	8.93%	5.81%	1.54%
15:00	8.07%	7.23%	0.74%
16:00	7.36%	5.17%	0.54%
17:00	8.07%	5.22%	1.02%
18:00	7.86%	5.46%	1.54%
19:00	7.26%	7.40%	1.06%
20:00	7.23%	4.56%	1.13%
21:00	6.87%	5.61%	1.29%
22:00	4.24%	4.42%	1.41%
23:00	4.01%	1.90%	0.56%

In Citygate's experience, a unit-hour utilization of 30 percent or higher over multiple consecutive hours becomes the point at which other responsibilities including training; coaching; mentoring subordinates; completing chores/cleaning; maintaining equipment; working on committees and projects; delivering fire prevention; conducting tours; major incident pre-planning; attending community events; plus desirable public relations at festivals, grand openings, birthday parties, and parades, do not get completed. No engine companies are nearing the 30 percent saturation rate. However, as with the simultanous demand rate, Engines 1 is busy during midday to early evening hours.

The next table illustrates UHU for South Metro's BLS ambulances. The busiest unit, Ambulance 1, stays below 30 percent utilization all hours of the day, but should be watched and not allowed to significantly exceed 30 percent for long hour after hour periods. Ambulance 4 is the reserve unit and its workload occurs when a frontline unit is down for repair. Thus, Ambulance 4's workload is added to that of the overall hour of day as being *in lieu of* another unit.

Table 14—Unit-Hour Utilization - EMS

Hour of Day	Amb. 1	Amb. 2	Amb. 3	Amb. 4 Reserve
00:00	13.21%	9.99%	0.16%	0.52%
01:00	12.48%	11.23%	0.14%	0.04%
02:00	12.57%	10.07%	0.75%	0.00%
03:00	9.41%	7.19%	0.31%	0.11%
04:00	9.38%	6.56%	0.40%	0.39%
05:00	12.13%	7.26%	3.31%	0.00%
06:00	11.93%	7.13%	0.00%	0.10%
07:00	16.41%	9.38%	0.60%	0.54%
08:00	13.95%	13.25%	12.50%	0.00%
09:00	14.33%	14.02%	11.75%	0.96%
10:00	21.75%	20.60%	12.07%	0.73%
11:00	24.56%	19.29%	12.35%	1.48%
12:00	23.08%	17.64%	13.76%	0.45%
13:00	25.57%	19.58%	14.46%	0.44%
14:00	20.07%	18.61%	13.96%	0.31%
15:00	23.50%	19.16%	11.24%	0.37%
16:00	25.74%	18.70%	7.73%	0.06%
17:00	22.49%	18.53%	5.75%	0.00%
18:00	23.86%	18.20%	0.91%	0.05%
19:00	23.15%	20.76%	0.81%	0.36%
20:00	24.11%	13.67%	0.19%	0.00%
21:00	19.65%	16.61%	0.96%	0.32%
22:00	20.01%	16.02%	0.19%	0.51%
23:00	17.43%	12.28%	0.39%	0.19%

2.7.5 Operational Performance

This section reports performance for the first apparatus to arrive on the scene of emergency incidents. "Emergency" is defined by data received which includes "Emergency," "Non-Emergency, Upgraded to Emergency," and excludes "Emergency, Downgraded to Non-Emergency."

- Call processing
- Crew turnout
- Travel
- Call to arrival

Call Processing

Call processing measures the time from the first incident timestamp until apparatus are notified of the request for assistance.

Call processing performance varies depending on the timestamps utilized. If the first incident timestamp takes place at the time dispatch receives a 9-1-1 call, then call processing includes PSAP time as well as dispatch handling time. Otherwise, the performance represents only a portion of the entire processing operation.

In addition, not all requests for assistance are received via 9-1-1. Generally, there will be a mix of "channels" for receiving requests for assistance. Each "channel" will have a timestamp at a different point in the processing operation. This is not as much of a factor if most requests are received via 9-1-1 PSAP.

Most of the incidents provided in the CAD data have matching timestamps for both *Time of Alarm* and *Time of Dispatch*. However, 10 percent of the incidents do have a distinct *Time of Alarm*. When distinct *Time of Alarm* and *Time of Dispatch* timestamps occur, the following table shows 90 percent call processing performance.

Table 15—90th Percentile Call Processing/Dispatch Performance

Station	Overall	RY 20/21	RY 21/22	RY 22/23
Department-Wide	**02:47**	**02:47**	**02:56**	**02:40**
Station 1	02:39	02:39	02:45	02:27
Station 2	03:14	03:06	03:00	03:22

Finding #11: Call processing performance, at 2:40 minutes in RY 22/23, is substantially slower than the 1:30-minute best practice goal.

Crew Turnout

Crew turnout measures the time interval from completion of the dispatch notification until the start of vehicle movement to the emergency incident. While NFPA recommends 1:00 to 1:20 minutes for turnout depending on the type of protective clothing that must be donned, Citygate has found that few (if any) agencies can meet that performance standard and has thus long recommended 2:00 minutes as an achievable goal for on-duty station personnel. The following table summarizes crew turnout performance by year.

Table 15—90th Percentile Crew Turnout Performance

Station	Overall	RY 20/21	RY 21/22	RY 22/23
Department-Wide	**01:48**	**01:59**	**01:41**	**01:38**
Station 1	01:46	02:00	01:41	01:35
Station 2	01:50	01:59	01:42	01:48

As the table shows, best practice for turnout performance was met consistently.

Finding #12: Crew turnout performance in RY 22/23 was 22 seconds *faster* than a recommended 2:00-minute best practice goal. Turnout time is not part of the slower call-to-arrival total response times.

First-Unit Travel

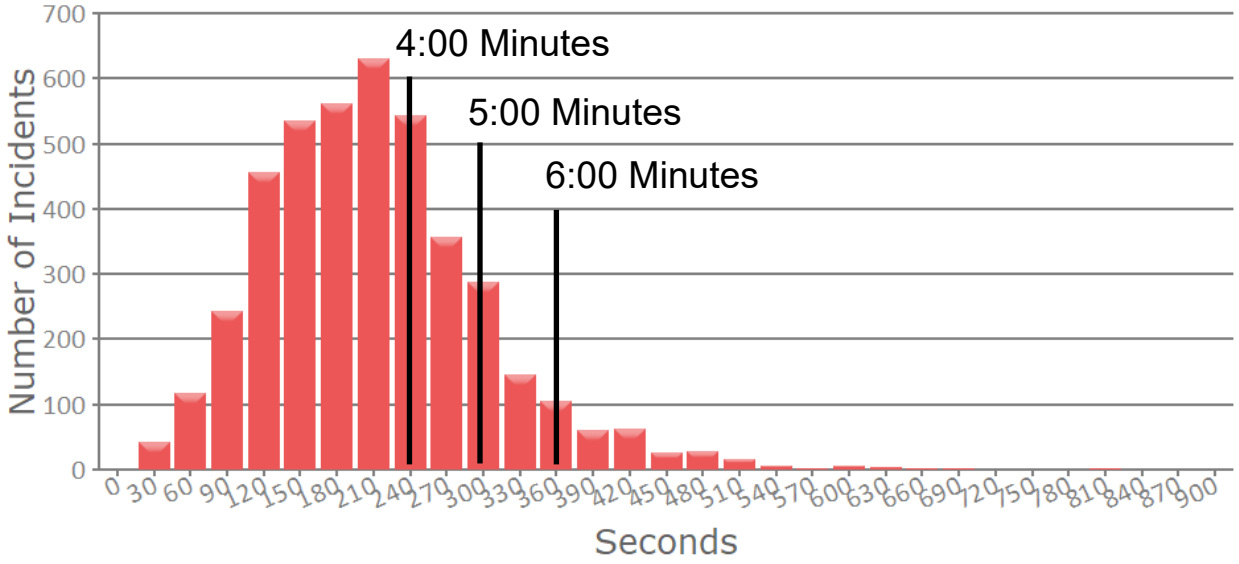
Travel time measures the time to travel to the scene of the emergency. In most urban and suburban fire jurisdictions, a 4:00-minute travel time with a compliance of 90 percent would be considered highly desirable. No stations achieve the 4:00-minute standard; however, Station 1 is consistently less than 5:00 minutes while Station 2 takes well into the 5th minute.

Table 16—Travel Analysis by Year

Station	Overall	RY 20/21	RY 21/22	RY 22/23
Department-Wide	**04:56**	**04:45**	**04:52**	**05:10**
Station 1	04:42	04:33	04:43	04:45
Station 2	05:23	05:01	05:09	05:47

The following graph illustrates fractile travel time performance with 210 seconds (or 3.5 minutes) the peak segment. There is, however, a slow drop-off in volume after the 210-second mark, indicating that while many incidents can be reached within the first 4:00 minutes, there are still a significant number of incidents that received much longer response times.

Figure 13—Travel Fractile Analysis



Finding #13: At 5:10 minutes in RY 22/23, first-unit travel time performance to fire and EMS incidents was 1:10 minutes *slower* than a recommended 4:00-minute best practice goal to facilitate desired outcomes in urban/suburban areas. The longer measures hold constant across the districts and years measured. The service area is too large to deliver 4:00-minute travel coverage from only two stations.

Call to Arrival

Call to arrival measures time from receipt of the request for assistance in the fire dispatch center until the first apparatus arrives at the incident. Typical best practice based and Citygate goals are 90 seconds for call processing, 2:00 minutes for turnout, and 4:00 minutes for travel. This adds up 450 seconds or 7:30 minutes.

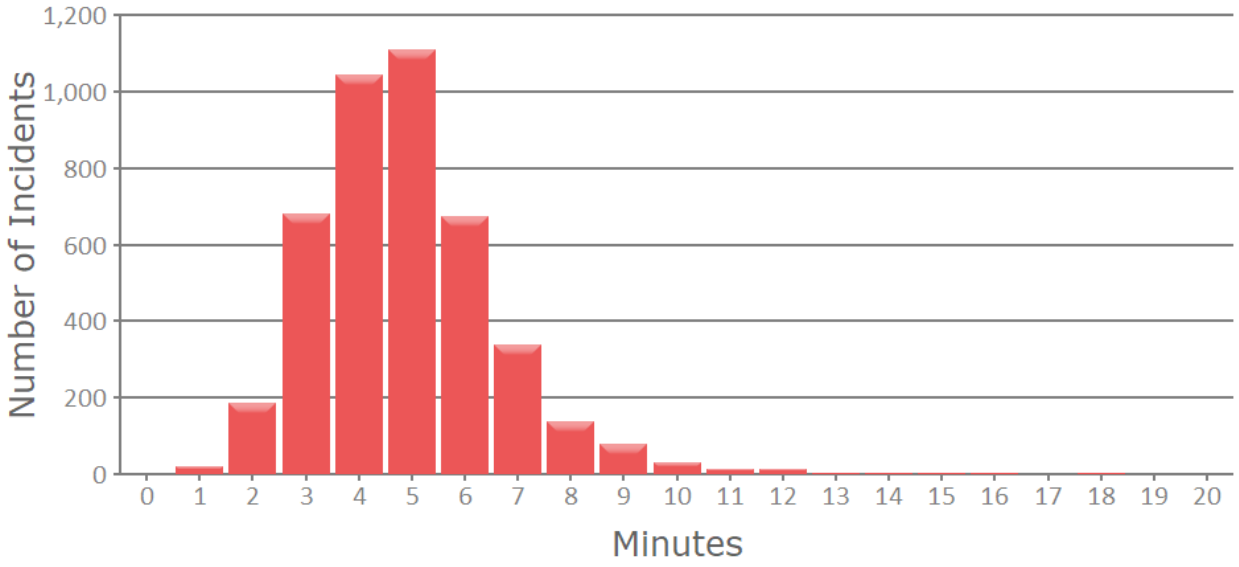
The Department meets this goal in both the Station 1 and Station 2 station area; however, it should be noted that call-to-arrival performance for Station 2 in RY 22/23 increased by 30 seconds.

Table 17—Call to Arrival Analysis by Year

Station Area	Overall	RY 20/21	RY 21/22	RY 22/23
Department-Wide	**06:18**	**06:12**	**06:13**	**06:30**
Station 1	06:03	06:05	06:01	06:03
Station 2	06:44	06:24	06:30	07:03

The following graph illustrates fractile call to arrival performance with 5:00 minutes the peak segment. The right-shifted graph indicates several incidents with longer call to arrival times; however, the total response times are good overall and overcome weak travel time due to the excellent crew turnout time and that many of the incidents are fairly close to the two fire station locations.

Figure 14—Call to Arrival Fractile



Finding #14: Department-wide first-unit call-to-arrival performance, at 6:30 minutes for RY 22/23, was *better* than a 7:30-minute Citygate-recommended best practice goal by 1:00 minute. Total response time performance is good overall and overcomes weak travel time performance due to the excellent crew turnout time and that many of the incidents are close to the two fire station locations.

2.7.6 Effective Response Force (ERF) Concentration *Travel* Time Measurements

The Department's ERF for a medium-risk building fire is two engines, one ladder truck, one ambulance, and one chief officer (if available) for a total of 8–13 South Metro personnel. Over the

three-year study period, there were only 10 out of 142 building fires where the *entire* ERF arrived at the incident. The following table displays the travel time for 90th percentile performance:

Table 18—Medium Risk Building Fire Distribution – ERF Response Group Travel

Station Area	Overall	RY 20/21	RY 21/22	RY 22/23
Department-Wide	10:15 (53)	10:15 (26)	08:32 (15)	09:53 (12)
Station 1	09:22 (32)	08:50 (14)	08:32 (8)	09:53 (10)
Station 2	10:19 (21)	11:40 (12)	06:28 (7)	05:47 (2)

Best practices and Citygate's recommendations are for an ERF *travel* time of 8:00 minutes for the last-due unit to arrive. It should be noted, however, that the performance is based on only 10 incidents over the three-year study period, and small data sets can be very volatile as some incidents can occur far from the fire stations.

Finding #15: Multiple-unit building fire travel time performance exceeded recommended best practice in 22/23 by 1:15 minutes primarily due to only two stations in the service area.

2.8 Overall Evaluation

SOC Element 8 of 8
Overall Evaluation

The Department serves an urban/suburban population with a mixed residential and non-residential land-use pattern typical of other Twin City area cities of similar size and demographics. The open spaces and highways in both cities, and the more curvilinear road network outside of the older core areas, produce barriers to providing fast response times from the fewest possible fire stations.

Given the risks to be protected and the desire for positive emergency outcomes, the Department's service area will always need both first-due unit and multiple-unit ERF coverage consistent with controlling a building fire to near the room(s) of origin and improving the chance of survival for patients with life-threatening medical emergencies.

The Department's deployment system is stressed in three key areas:

1. Dispatch processing and travel time performance
2. The rising rate of emergency medical incidents
3. The travel time coverage *and staffing* limitations of the current two fire stations

Challenge #1 – Dispatch Processing and Travel Time Performance

The following table shows the Department's response performance over the most recent year of complete data compared to best practices for positive outcomes. As can be seen, the weakest components are call processing/dispatch, first-unit travel, and ERF travel performance, although overall call-to-arrival performance was faster than Citygate's 7:30-minute recommended goal by a full minute.

Table 18—90th Percentile Response Performance Summary RY 22/23

Response Component	Recommended Best Practice		90th Percentile Performance	Performance Compared to Best Practice
	Time	Reference		
Call Processing / Dispatch	1:30 1:04 Critical	Citygate NFPA	**2:40**	**+ 1:10**
Crew Turnout	2:00 1:00	Citygate NFPA	**1:38**	**- 0:22**
First Unit Travel	4:00	Citygate NFPA	**5:10**	**+ 1:10**
First Unit Call-to-Arrival	7:30	Citygate	**6:30**	**- 1:00**
ERF Travel	8:00	Citygate NFPA	**9:53**	**+ 1:53**

Challenge #2 – Rising EMS Demand

The state of health care coverage in the United States has created an ever-increasing EMS demand on America's fire service—which is exacerbated by the unhoused crisis, thus creating a high demand for low-acuity EMS responses for patients that seldom need immediate emergency room care. The Department and regional paramedic system are also facing this challenge. Citygate submits that adding more BLS ambulance transport capacity via the Department is not the best way forward. There needs to be a subregional, non-9-1-1, non-sworn firefighter response team jointly funded by local government and the health care system to respond to mental health and low-acuity medical incidents that do not require emergency room care.

Challenge #3 – Fire Station Travel Time Coverage and Staffing Limitations

The service area is simply too large for only one fire station to provide response times that achieve desired urban/suburban community outcomes. The excellent *Department-wide* total response time performance over the three-year study period is due only to many incidents being close to *both* fire stations. Any reduction in station coverage will appreciably lengthen travel times past desired

positive outcomes in urban areas—even more so in the northwest and southwest sections of the service area that have higher population densities.

Ideally, if both stations could be moved and a third station added, the service area needs the added station to form an "inverted triangle" of coverage, with two stations in the upper half of the service area and one in the southeast to serve that area.

In addition, the Department's current daily staffing provides an ERF of only 8 personnel at minimum staffing and 12 at full staffing (13 when a chief officer is available), which is 3–8 personnel less than the recommended ERF of 16–17 personnel[8] to safely accomplish the critical tasks for a low- to moderate-risk building fire in time to achieve positive outcomes. As funding allows, Citygate recommends the JPA consider increasing minimum daily staffing to at least 12 personnel plus a Battalion Chief on each shift. This would provide a stronger ERF which meets recommended best practice and requires only a single mutual-aid resource from an adjacent fire agency. Reducing from the current two station model to a one station model would not reduce the minimum daily staffing required to provide an ERF.

Considering the limited projected growth, Citygate recommends the Department adopt a 5:00-minute travel time and, when that measure cannot be substantially met, a third station should be considered.

2.8.1 Deployment Recommendations

Based on the technical analysis and findings contained in this assessment, Citygate makes the following deployment recommendations.

Recommendation #1:	Adopt a 5:00-minute travel time goal for fire station spacing.
Recommendation #2:	Continue to work with the appropriate County health, regional hospitals, and other first responder agencies to implement a non-9-1-1 care team for behavioral and non-acute medical issues
Recommendation #3:	**Adopt Updated Deployment Policies:** The JPA should adopt complete response performance measures to aid deployment planning and to monitor response performance. The measures of time should be designed to

[8] NFPA 1710 Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments (2020 Edition)

deliver outcomes that will prevent death or more serious injury for EMS patients upon arrival when possible and keep small fires from becoming more serious. With this is mind, Citygate recommends the following measures.

3.1 **First-Due Unit:** To treat pre-hospital medical emergencies and control small fires, the first-due unit should arrive within 8:30 minutes, 90 percent of the time, from receipt of the 9-1-1 call at County dispatch. This equates to a 1:30-minute call processing / dispatch time, a 2:00-minute crew turnout time, and a 5:00-minute travel time.

3.2 **Multiple-Unit Effective Response Force for Serious Emergencies:** To confine building fires near the room or rooms of origin, keep vegetation fires under one acre in size, and treat multiple medical patients at a single incident, a multiple-unit ERF of at least 15 personnel, including at least one Chief Officer, should arrive within 11:30 minutes from the time of call receipt at County dispatch at 90 percent or better reliability. This equates to a 1:30-minute call processing / dispatch time, a 2:00-minute crew turnout time, and an 8:00-minute travel time, respectively.

3.3 **Hazardous Materials Response:** To protect the service area from hazards associated with uncontrolled release of hazardous and toxic materials, the fundamental mission of the Department's response is to isolate the hazard, deny entry into the hazard zone, and minimize impacts on the community. This can be achieved with a first-due total response time of 8:30 minutes or less to provide initial hazard evaluation and mitigation actions. After the initial evaluation is completed, a determination can be made whether to request additional resources to mitigate the hazard.

3.4 **Technical Rescue:** To respond to technical rescue emergencies as efficiently and effectively as possible with enough trained personnel to facilitate a successful rescue, a first-due total response time of 8:30 minutes or less is required to evaluate the situation and initiate rescue

	actions. Additional resources should assemble as needed within a total response time of 11:30 minutes or less to safely complete rescue/extrication and delivery of the victim to the appropriate emergency medical care facility.
Recommendation #4:	Maintain the current two-station deployment model until the recommended 5:00-minute first-unit travel time measure cannot be substantially met, then a third station should be considered.
Recommendation #5:	As funding allows, consider increasing minimum daily staffing from 8 to 12 plus a Battalion Chief on each shift, to meet recommended best practice multiple unit staffing to serious emergencies with one automatic aid resource from an adjacent fire agency. Reduction in the number of stations will not reduce the recommended increase in daily staffing.

2.9 NEXT STEPS

- Review and absorb the content, findings, and recommendations of this report.
- Adopt updated response performance goals as recommended.
- Work with the County agencies and regional health providers to field a non-9-1-1 behavioral and low-acuity medical response team.
- Consider increasing minimum daily staffing as funding allows.

APPENDIX A – COMMUNITY RISK ASSESSMENT

A.1 COMMUNITY RISK ASSESSMENT

SOC ELEMENT 3 OF 8
COMMUNITY RISK ASSESSMENT

The third element of the Standards of Coverage (SOC) process is a community risk assessment. Within the context of an SOC study, the objectives of a community risk assessment are to:

- Identify the values at risk to be protected within the community or service area.
- Identify the specific hazards with the potential to adversely impact the community or service area.
- Quantify the overall risk associated with each hazard.
- Establish a foundation for current/future deployment decisions and risk-reduction/hazard-mitigation planning and evaluation.

A hazard is broadly defined as a situation or condition that can cause or contribute to harm. Examples include fire, medical emergency, vehicle collision, earthquake, flood, etc. Risk is broadly defined as the *probability of hazard occurrence* in combination with the *likely severity of resultant impacts* to people, property, and the community.

A.1.1 Risk Assessment Methodology

The methodology employed by Citygate to assess community risks as an integral element of an SOC study incorporates the following elements:

- Identification of geographic planning sub-zones (risk zones) appropriate to the community or jurisdiction.
- Identification and quantification, to the extent data is available, of the specific values at risk to various hazards within the community or service area.
- Identification of the fire and non-fire hazards likely to impact the community or service area relative to services provided by the fire agency.
- Determination of the probability of occurrence for each hazard.
- Determination of *probable* impact severity of a hazard occurrence by planning zone.

- Determination of the impact severity of a hazard occurrence on the fire agency's overall response capacity.
- Determination of overall risk by hazard considering probability of occurrence and likely impact severity according to the following table.

Table 19—Overall Risk

Probability	Impact				
	Insignificant	Minor	Moderate	Major	Catastrophic
Rare	*Low*	*Low*	*Low*	*Moderate*	*High*
Unlikely	*Low*	*Low*	*Low*	*Moderate*	*High*
Possible	*Low*	*Low*	*Moderate*	*High*	*Extreme*
Probable	*Low*	*Low*	*Moderate*	*High*	*Extreme*
Frequent	*Low*	*Moderate*	*High*	*Extreme*	*Extreme*

For this assessment, Citygate used the following data sources to understand the hazards and values to be protected in the Cities of South Saint Paul and West Saint Paul:

- Esri and U. S. Census Bureau population and demographic data
- City Geographical Information Systems (GIS) data
- City General Plan and Zoning information
- City and Dakota County Hazard Mitigation Plans
- Department and other City data and information.

A.1.2 Risk Assessment Summary

Citygate's evaluation of the values at risk and hazards likely to impact the service area yields the following:

1. The Department serves a diverse urban population with densities ranging from less than 2,500 to more than 8,500 people per square mile over a varied urban land use pattern.
2. The Department's service area population is projected to grow approximately 8 percent by 2040.
3. The service area has a large inventory of residential and non-residential buildings to protect.

4. The service area has significant economic and other resource values to be protected, as identified in this assessment.

5. The Department has access to electronic mass emergency notification options and outdoor warning sirens available to effectively communicate emergency information to the public in a timely manner.

6. The service area's risk for six hazards related to emergency services provided by the Department range from **Low** to **High** as summarized in the following table.

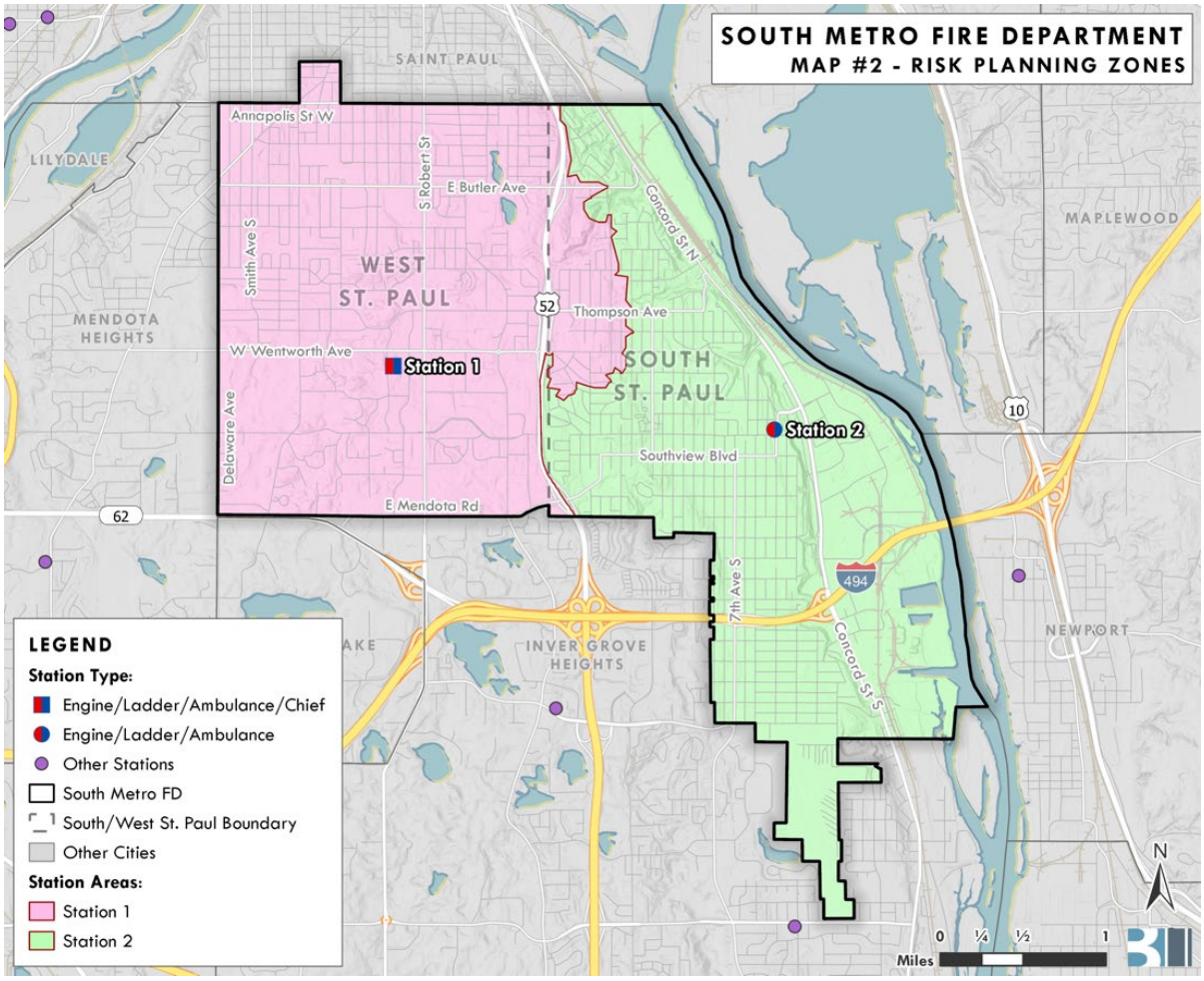
Table 20—Overall Risk by Incident Type

Hazard	Planning Zone	
	Station 1	Station 2
Building Fire	***Moderate***	***Moderate***
Vegetation/Wildland Fire	***Low***	***Low***
Medical Emergency	***High***	***High***
Hazardous Materials	***Moderate***	***Moderate***
Technical Rescue	***Moderate***	***Moderate***
Marine Incident	***Low***	***Low***

A.1.3 Planning Zones

The Commission on Fire Accreditation International (CFAI) recommends jurisdictions establish geographic planning zones to better understand risk at a sub-jurisdictional level. For example, portions of a jurisdiction may contain predominantly moderate risk building occupancies, such as detached single-family residences, while other areas contain high- or maximum-risk occupancies, such as commercial and industrial buildings with a high hazard fire load. If risk were to be evaluated on a jurisdiction-wide basis, the predominant moderate risk could outweigh the high or maximum risk and may not be a significant factor in an overall assessment of risk. If, however, high- or maximum-risk occupancies are a larger percentage of the risk in a smaller planning zone, then they become a more significant risk factor. Another consideration in establishing planning zones is that the jurisdiction's record management system must also track the specific zone for each incident to appropriately evaluate service demand and response performance relative to each specific zone. For this assessment, Citygate utilized two planning zones corresponding with established City Fire Management Areas (FMA) and fire station first-due response areas as shown on the following map.

Figure 15—Risk Planning Zones



A.1.4 Values at Risk to Be Protected

Values at risk, broadly defined, are tangibles of significant importance or value to the community or jurisdiction potentially at risk of harm or damage from a hazard occurrence. Values at risk typically include people, critical facilities/infrastructure, buildings, and key economic, cultural, historic, or natural resources.

People

Residents, employees, visitors, and travelers in a community or jurisdiction are vulnerable to harm from a hazard occurrence. Particularly vulnerable are specific at-risk populations, including those unable to care for themselves or self-evacuate in the event of an emergency. At-risk populations typically include children under the age of 10, the elderly, people housed in institutional settings, and households below the federal poverty level. The following table summarizes key demographic data for the combined South Metro Fire Department service area.

Table 21—Key Demographic Data – South Metro Service Area

Demographic	2023
Population	**41,415**
Under 10 years	12.1%
10 – 14 years	6.2%
15 – 64 years	62.7%
65 - 74 years	10.8%
75 years and older	8.3%
Median age	40.6
Daytime population	37,633
Housing Units	**18,475**
Owner-Occupied	61.20%
Renter-Occupied	33.60%
Vacant	5.20%
Median Household Size	2.34
Median Home Value	$272,043
Ethnicity	
White Alone	69.00%
Black/African American Alone	7.30%
Asian Alone	2.90%
Some Other Race Alone	10.00%
Two or More Races	10.80%
Hispanic/Latino Origin	18.90%
Diversity Index	65.2
Education (population over 24 yrs. of age)	**29,408**
High School Graduate	93.80%
Undergraduate Degree	32.80%
Graduate/Professional Degree	10.30%
Employment (population over 15 yrs. of age)	**23,086**
In Labor Force	93.40%
Unemployed	6.60%
Median Household Income	$68,221
Population Below Poverty Level	11.30%
Population without Health Insurance Coverage	6.85%

Source: Esri Community Analyst (2023) and U.S. Census Bureau

Of note from the previous table is the following:

- Slightly more than 31 percent of the population is under 10 years or over 65 years of age.
- The service area population is predominantly White Alone (69 percent), followed by Two or More Races (11 percent), Other Ethnicity Alone (10 percent), Black / African American Alone (7 percent), and Asian Alone (3 percent). In addition, nearly 19 percent of the population is Hispanic/Latino in origin.
- Of the population over 24 years of age, almost 94 percent has completed high school or equivalency.
- Of the population over 24 years of age, nearly 33 percent has an undergraduate degree, and slightly more than 10 percent has a graduate or professional degree.
- Of the population 15 years of age or older, more than 93 percent is in the workforce; of those, nearly 7 percent are unemployed.
- Median household income is nearly $69,000.
- The population below the federal poverty level is slightly more than 11 percent.
- Nearly 7 percent of the population does not have health insurance coverage.

The service area's Comprehensive Plan projects slightly more than 1,800 new households by 2040.[9]

Buildings

The service area has nearly 19,000 residential housing units and 1,250 other buildings housing manufacturing, research, technology, office, professional services, retail sales, restaurants/bars, motels, churches, schools, storage, government facilities, healthcare facilities, and other occupancy types.[10]

Building Occupancy Risk Categories

The CFAI identifies the following four risk categories that relate to building occupancy:

[9] Source: Metropolitan Council. THRIVE MSP 2040 Forecast.
[10] Source: Esri Community Analyst – Community Profile (2023).

Low Risk – includes detached garages, storage sheds, outbuildings, and similar building occupancies that pose a relatively low risk of harm to humans or the community if damaged or destroyed by fire.

Moderate Risk – includes detached single-family or two-family dwellings; mobile homes; commercial and industrial buildings smaller than 10,000 square feet without a high hazard fire load; aircraft; railroad facilities; and similar building occupancies where loss of life or property damage is limited to the single building.

High Risk – includes apartment/condominium buildings; commercial and industrial buildings larger than 10,000 square feet without a high hazard fire load; low-occupant load buildings with high fuel loading or hazardous materials; and similar occupancies with potential for substantial loss of life or unusual property damage or financial impact.

Maximum Risk – includes buildings or facilities with unusually high risk requiring an Effective Response Force (ERF) involving a significant augmentation of resources and personnel and where a fire would pose the potential for a catastrophic event involving large loss of life or significant economic impact to the community.

Critical Facilities

The U.S. Department of Homeland Security defines critical infrastructure and key resources as those physical assets essential to the public health and safety, economic vitality, and resilience of a community, such as lifeline utilities infrastructure, telecommunications infrastructure, essential government services facilities, public safety facilities, schools, hospitals, airports, etc. The Department has identified a number of critical facilities and infrastructure. A hazard occurrence with significant impact severity affecting one or more of these facilities would likely adversely impact critical public or community services.

Economic Resources

The service area has nearly 1300 businesses employing nearly 18,000 people. Key economic industries include educational, city and county government, manufacturing, retail, and services.[11]

Natural Resources

Key natural resources within the service area include:[12]

- Over seven miles of river and 37 acres of open water.

[11] Source: City of South St. Paul 2022 ACFR, City of West St. Paul 2021 ACFR.
[12] Source: West St. Paul 2040 Comprehensive Plan, Dakota County River to River Management Plan.

- Over 830 acres of parks and open space, including River to River Greenway and Kaposia Landing.

A.1.5 Hazard Identification

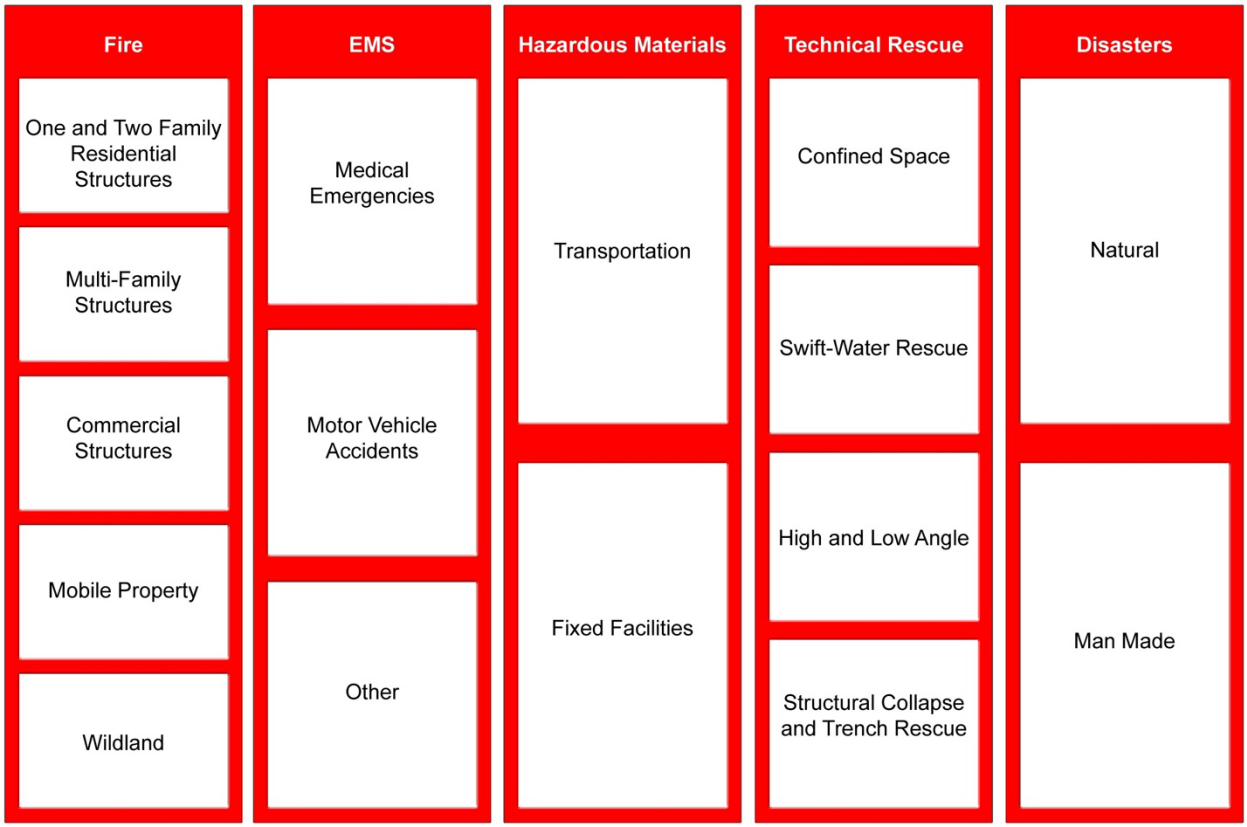
Citygate utilizes prior risk studies where available, fire and non-fire hazards as identified by the CFAI, and agency/jurisdiction-specific data and information to identify the hazards to be evaluated for this study. The 2021 Dakota County Minnesota All Hazards Mitigation Plan identifies the following 15 hazards likely to impact the service area:

1. Drought
2. Extreme Temperature
3. Flood (Flash and Overland)
4. Infectious Disease Outbreak
5. Landslide
6. Tornado
7. Violent Winter/Summer Storms
8. Wildfire
9. Civil Disturbance
10. Cyber Attack
11. Dam failure
12. Hazardous Materials
13. Terrorism
14. Wastewater Treatment System Failure
15. Water Supply Contamination

Although the Department has no legal authority or responsibility to mitigate any hazards other than possibly for wildfire, it does provide services related to many hazards, including fire suppression, emergency medical services, technical rescue, and hazardous materials response.

The CFAI groups hazards into fire and non-fire categories, as shown in the following figure. Identification, qualification, and quantification of the various fire and non-fire hazards are important factors in evaluating how resources are or can be deployed to mitigate those risks.

Figure 16—Commission on Fire Accreditation International Hazard Categories



Source: CFAI *Standards of Cover* (Fifth Edition)

After review and evaluation of the hazards identified in the 2021 Dakota County Hazard Mitigation Plan, and the fire and non-fire hazards as identified by the CFAI as they relate to services provided by the Department, Citygate evaluated the following six hazards for this risk assessment:

1. Building fire
2. Vegetation/wildland fire
3. Medical emergency
4. Hazardous material release/spill
5. Technical rescue
6. Marine incident

A.1.6 Service Capacity

Service capacity refers to an agency's available response force; the size, types, and condition of its response fleet and any specialized equipment; core and specialized performance capabilities and competencies; resource distribution and concentration; availability of automatic or mutual aid;

and any other agency-specific factors influencing its ability to meet current and prospective future service demand and response performance relative to the risks to be protected.

The Department's service capacity for fire and non-fire risk consists of eight minimum personnel on duty daily staffing two engines and two aerial ladder trucks cross staffing two ambulances, operating from the Department's two fire stations. There is also one 40-hour peak demand ambulance staffed during weekday business hours. The Department also has one brush engine, two reserve engines, one marine response watercraft (a 28-foot landing craft-style boat equipped with a 350-gallon-per-minute pump), and one reserve ambulance. All South Metro Fire Department response personnel are trained to the Emergency Medical Technician (EMT) level, capable of providing Basic Life Support (BLS) pre-hospital emergency medical care. EMT-Paramedic (Paramedic) level, capable of providing Advanced Life Support (ALS) pre-hospital emergency medical care and ground paramedic ambulance service is provided by MHealth Fairview, a private-sector ambulance provider operating under an exclusive operating area contract administered by the Dakota County Emergency Medical Services Advisory Council which includes air ambulance services, when needed. Response personnel are also trained to the U.S. Department of Transportation Hazardous Material First Responder Operational (FRO) level to provide initial hazardous material incident assessment, hazard isolation, and support/partially staff the Dakota County Special Operations Team (DCSOT). The Department has 10 personnel trained to the Hazardous Materials Specialist or Technician level to partially staff the DCSOT. All response personnel are further trained to the Confined Space Awareness and Low Angle Rope Rescue Operations levels, with 10 personnel also trained to the Trench Rescue Technician level, Confined Space / USAR Technician level, high-angle rope rescue, heavy machinery rescue, and heavy vehicle extrication to partially staff the DCSOT as requested in the Dakota County service area.

A.1.7 Probability of Occurrence

Probability of occurrence refers to the probability of a future hazard occurrence during a specific period. Because the CFAI agency accreditation process requires annual review of an agency's risk assessment and baseline performance measures, Citygate recommends using the 12 months following the completion of an SOC study as an appropriate period for the probability of occurrence evaluation. The following table describes the five probability of occurrence categories and related characteristics used for this analysis.

Table 22—Probability of Occurrence Categories

Category	General Characteristics	Anticipated Frequency of Occurrence
Rare	• Hazard ***may occur*** under exceptional circumstances.	> 10 years
Unlikely	• Hazard ***could occur*** at some time. • No recorded or anecdotal evidence of occurrence. • Little opportunity, reason, or means for hazard to occur.	2–10 years
Possible	• Hazard ***should occur*** at some time. • Infrequent, random recorded or anecdotal evidence of occurrence. • Some opportunity, reason, or means for hazard to occur.	1–23 months
Probable	• Hazard will ***probably occur*** occasionally. • Regular recorded or strong anecdotal evidence of occurrence. • Considerable opportunity, reason, or means for hazard to occur.	1–4 weeks
Frequent	• Hazard is ***expected to occur*** regularly. • High level of recorded or anecdotal evidence of regular occurrence. • Strong opportunity, reason, or means for hazard to occur. • Frequent hazard recurrence.	Daily to weekly

Citygate's SOC assessments use recent multiple-year hazard response data to determine the probability of hazard occurrence for the ensuing 12-month period.

A.1.8 Impact Severity

Impact severity refers to the *probable* extent a hazard occurrence has on people, buildings, lifeline services, the environment, and the community. The following table describes the five impact severity categories and general characteristics used for this analysis.

Table 23—Impact Severity Categories

Category	General Characteristics
Insignificant	• No injuries or fatalities • Few to no persons displaced for short duration • Little or no personal support required • Inconsequential to no damage • Minimal to no community disruption • No measurable environmental impacts • Minimal to no financial loss • No wildland Fire Hazard Severity Zones (FHSZs)
Minor	• Few injuries; no fatalities; minor medical treatment only • Some displacement of persons for less than 24 hours • Some personal support required • Some minor damage • Minor community disruption of short duration • Small environmental impacts with no lasting effects • Minor financial loss • No wildland FHSZs
Moderate	• Medical treatment required; some hospitalizations; few fatalities • Localized displacement of persons for fewer than 24 hours • Personal support satisfied with local resources • Localized damage • Normal community functioning with some inconvenience • No measurable environmental impacts with no long-term effects, or small impacts with long-term effect • Moderate financial loss • Less than 25% of area in *Moderate* or *High* wildland FHSZs
Major	• Extensive injuries; significant hospitalizations; many fatalities • Large number of persons displaced for more than 24 hours • External resources required for personal support • Significant damage • Significant community disruption; some services not available • Some impact to environment with long-term effects • Major financial loss with some financial assistance required • More than 25% of area in *Moderate* or *High* wildland FHSZs; less than 25% in *Very High* wildland FHSZs
Extreme	• Large number of severe injuries requiring hospitalization; significant fatalities • General displacement for extended duration • Extensive personal support required • Extensive damage • Community unable to function without significant external support • Significant impact to environment and/or permanent damage • Catastrophic financial loss; unable to function without significant support • More than 50% of area in *High* wildland FHSZs; more than 25% of area in *Very High* wildland FHSZs

A.1.9 Overall Risk

Overall risk was determined by considering the probability of occurrence, reasonably expected impact severity according to the following table.

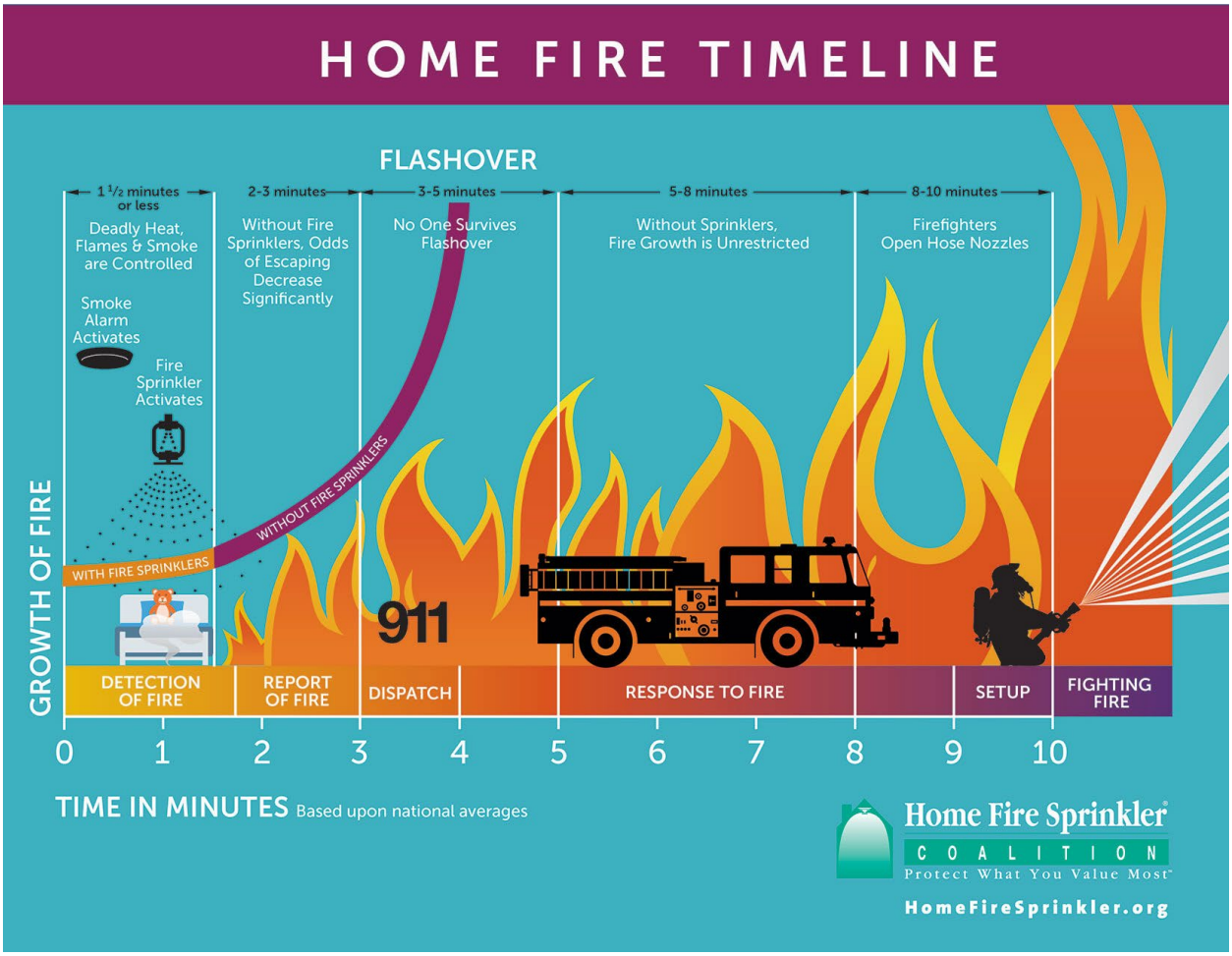
Probability	Impact				
	Insignificant	Minor	Moderate	Major	Catastrophic
Rare	*Low*	*Low*	*Low*	*Moderate*	*High*
Unlikely	*Low*	*Low*	*Low*	*Moderate*	*High*
Possible	*Low*	*Low*	*Moderate*	*High*	*Extreme*
Probable	*Low*	*Low*	*Moderate*	*High*	*Extreme*
Frequent	*Low*	*Moderate*	*High*	*Extreme*	*Extreme*

A.1.10 Building Fire Risk

One of the primary hazards in any community is building fire. Building fire risk factors include building size, age, construction type, density, occupancy, and height above ground level; required fire flow; proximity to other buildings; built-in fire protection/alarm systems; available fire suppression water supply; building fire service capacity; and fire suppression resource deployment (distribution/concentration), staffing, and response time. Citygate used available data from the Department and the U.S. Census Bureau and the Dakota County Office of Planning to assist in determining the service area's building fire risk.

The following figure illustrates the building fire progression timeline and shows that flashover, which is the point at which the entire room erupts into fire after all the combustible objects in that room reach their ignition temperature, can occur as early as three to five minutes from the initial ignition. Human survival in a room after flashover is extremely improbable.

Figure 17—Building Fire Progression Timeline



Source: http://www.firesprinklerassoc.org.

Population Density

Population density within the service area ranges from less than 2,500 to more than 8,500 people per square mile. [13] Although risk analysis across a wide spectrum of other Citygate clients shows no direct correlation between population density and building fire *occurrence*, it is reasonable to conclude that building fire *risk* relative to potential impact on human life is greater as population density increases, particularly in areas with high density, multiple-story buildings.

Water Supply

A reliable public water system providing adequate volume, pressure, and flow duration near all buildings is a critical factor in mitigating the potential impact severity of a community's building

[13] Source: ESRI and U.S. Census Bureau

fire risk. Potable water is provided by the City of South St. Paul and by Saint Paul Regional Water Services in West St. Paul, and according to Fire Department staff, available fire flow volume and pressure are adequate throughout the service area except for areas without fire hydrants.

Building Fire Service Demand

For the three-year period from January 1, 2020, through December 31, 2022, the service area experienced 142 building fire incidents comprising 0.64 percent of total service demand over the same period, as summarized in the following tables.

Table 24—Building Fire Service Demand

Hazard	Year	Planning Zone			Total	Percent Total Annual Demand
		Sta. 1	Sta. 2	Other		
Building Fire	RY 20/21	31	21	-	52	0.74%
	RY 21/22	24	20	0	44	0.59%
	RY 22/23	28	17	1	46	0.59%
	Total	83	58	1	142	0.64%
Percent Total Station Demand		0.62%	0.66%	20.00%		

As the table shows, annual building fire service demand fluctuated by up to nearly 20 percent over the three-year study period. Overall, building fire service demand is low at only 0.64 percent of total service demand.

Building Fire Risk Assessment

The following table summarizes Citygate's assessment of the service area's building fire risk by planning zone.

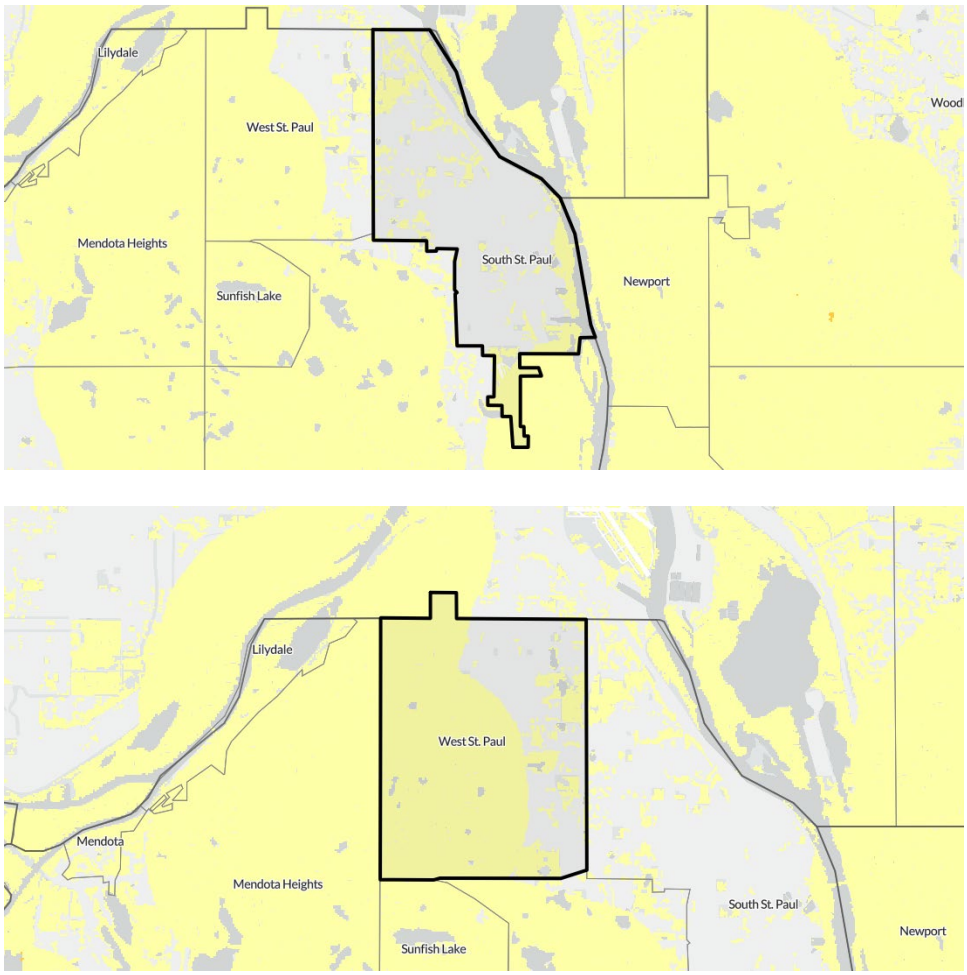
Table 25—Building Fire Risk Assessment

Building Fire Risk	Planning Zone	
	Station 1	Station 2
Probability of Occurrence	*Probable*	*Probable*
Probable Impact Severity	*Moderate*	*Moderate*
Overall Risk	***Moderate***	***Moderate***

A.1.11 Vegetation/Wildland Fire Risk

Some of the service area is susceptible to a vegetation/wildfire, as identified in the following map from the Minnesota Department of Natural Resources (DNR). Vegetation/wildland fire risk factors include vegetative fuel types and configuration, weather, topography, prior service demand, water supply, mitigation measures, and vegetation fire service capacity.

Figure 18—Wildfire Hazard Risk Zones



Source: Minnesota Department of Natural Resources.

The DNR also designates wildland–urban interface (WUI) areas of the state where urban or suburban development exists within a wildland vegetation environment prone to fire. These are the areas with at least 20 people per square mile with the most potential for significant damage to life and property, as shown in the following map. The Department's service area is in a ***lower*** wildfire risk zone.

Vegetation/Wildland Fire Service Demand

Over the three-year study period, the Department responded to 34 vegetation/wildfires comprising 0.15 percent of total service demand over the same period, as summarized in the following tables.

Table 26—Vegetation/Wildland Fire Service Demand

Hazard	Year	Planning Zone		Total	Percent Total Annual Service Demand
		Station 1	Station 2		
Vegetation/Wildland Fire	2020	5	7	**12**	0.17%
	2021	6	6	**12**	0.16%
	2022	8	2	**10**	0.13%
	Total	**19**	**15**	**34**	0.15%
Percent of Total Station Service Demand		0.14%	0.17%		

The table shows annual vegetation/wildland fire service demand consistent over the three-year study with very low overall demand.

Vegetation/Wildland Fire Risk Assessment

The following table summarizes Citygate's assessment of the service area's vegetation/wildland fire risk by planning zone.

Table 27—Vegetation/Wildland Fire Risk Assessment

Vegetation/Wildland Fire Risk	Planning Zone	
	Station 1	Station 2
Probability of Occurrence	*Possible*	*Possible*
Probable Impact Severity	*Minor*	*Minor*
Overall Risk	***Low***	***Low***

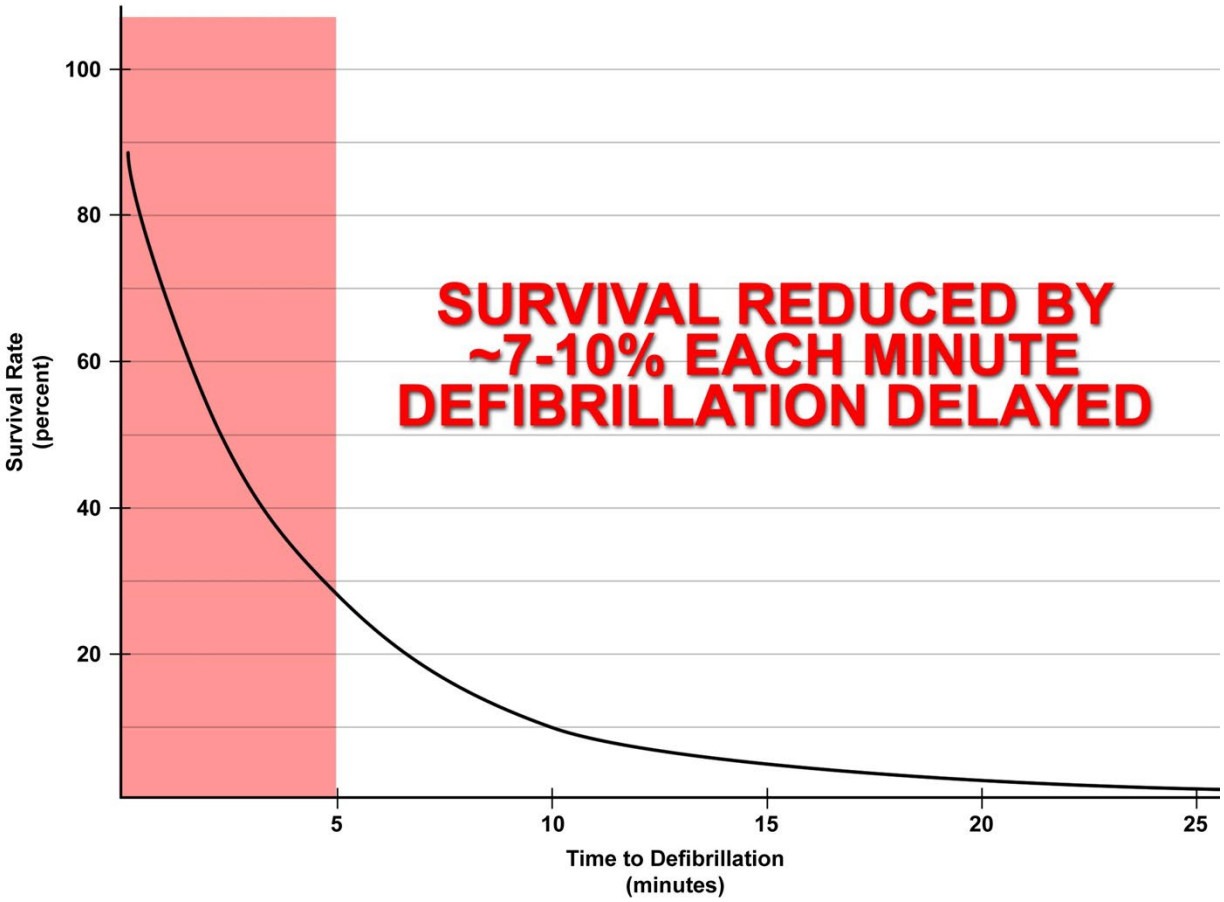
A.1.12 Medical Emergency Risk

Medical emergency risk in most communities is predominantly a function of population density, demographics, violence, health insurance coverage, and vehicle traffic.

Medical emergency risk can also be categorized as either a medical emergency resulting from a traumatic injury or a health-related condition or event. Cardiac arrest is one serious medical emergency among many where there is an interruption or blockage of oxygen to the brain.

The following figure illustrates the reduced survivability of a cardiac arrest victim as time to defibrillation increases. While early defibrillation is one factor in cardiac arrest survivability, other factors can influence survivability as well, such as early CPR and pre-hospital advanced life support interventions.

Figure 19—Survival Rate versus Time to Defibrillation



Population Density

Population density in the service area ranges from less than 2500 to more than 8,500 people per square mile, as shown in Map #2a (**Volume 2—Map Atlas**). Risk analysis across a wide spectrum of other Citygate clients shows a direct correlation between population density and the *occurrence* of medical emergencies, particularly in high urban population density zones.

Demographics

Medical emergency risk tends to be higher among older, poorer, less educated, and uninsured populations. As shown in Table 21, 21.8 percent of the service area population is 65 and older; 6.1 percent of the population over 24 years of age has less than a high school education or equivalent;

just over 11 percent of the population is at or below poverty level; and 6.9 percent of the population does not have health insurance coverage.[14]

Vehicle Traffic

Medical emergency risk tends to be higher in areas of a community with high daily vehicle traffic volume, particularly areas with high traffic volume traveling at high speeds. The service area's transportation network includes Highways 52 and 494 carrying an aggregate annual average daily traffic volume of more than 167,000 vehicles.[15]

Medical Emergency Service Demand

Medical emergency service demand over the three-year study period includes more than 16,000 calls for service comprising over 75 percent of total service demand over the same period, as summarized in the following tables.

Table 28—Medical Emergency Service Demand

Hazard	Year	Planning Zone		Total	Percent Total Annual Service Demand
		Station 1	Station 2		
Medical Emergency	2020	3152	2070	**5222**	74.55%
	2021	3492	2157	**5649**	76.00%
	2022	3667	2179	**5846**	75.50%
	Total	**10311**	**6406**	**16,717**	75.37%
Percent of Total Station Service Demand		77.07%	72.87%		

As the table shows, medical emergency service demand varies consistently by planning zone and has increased by 11 percent over the three-year study period.

Medical Emergency Risk Assessment

The following table summarizes Citygate's assessment of the service area's medical emergency risk by planning zone.

[14] Source: ESRI and US Census Bureau.
[15] Source: Minnesota Department of Transportation Traffic Mapping Application 2022 data: Traffic Mapping Application (arcgis.com)

Table 29—Medical Emergency Risk Assessment

Medical Emergency Risk	Planning Zone	
	Station 1	Station 2
Probability of Occurrence	*Frequent*	*Frequent*
Probable Impact Severity	*Moderate*	*Moderate*
Overall Risk	***High***	***High***

A.1.13 Hazardous Material Risk

Hazardous material risk factors include fixed facilities that store, use, or produce hazardous chemicals or waste; underground pipelines conveying hazardous materials; aviation, railroad, maritime, and vehicle transportation of hazardous commodities into or through a jurisdiction; vulnerable populations; emergency evacuation planning and related training; and specialized hazardous material service capacity.

Fixed Hazardous Materials Facilities

The Dakota County Hazard Mitigation Plan identified many sites requiring a state or county hazardous material operating permit or Hazardous Materials Business Plan. In addition, high-pressure natural gas distribution pipelines are located throughout the service area.

Population Density

Because hazardous material emergencies have the potential to adversely impact human health, it is logical that the higher the population density, the greater the potential population exposed to a hazardous material release or spill. As shown in Map #2b (**Volume 2 – Map Atlas**), the service area population density ranges from less than 2,500 to more than 8,500 people per square mile.

Vulnerable Populations

Persons vulnerable to a hazardous material release/spill include individuals or groups unable to self-evacuate, generally including children under the age of 10, the elderly, and persons confined to an institution or other setting where they are unable to leave voluntarily. As shown in Table 21, nearly one third of the population is under age 10 or is 65 years and older.

Emergency Evacuation Planning, Training, Implementation, and Effectiveness

Another significant hazardous material impact severity factor is a jurisdiction's shelter-in-place / emergency evacuation planning and training. In the event of a hazardous material release or spill, time can be a critical factor in notifying potentially affected persons, particularly at-risk populations, to either shelter-in-place or evacuate to a safe location. Essential to this process is an

effective emergency plan that incorporates one or more mass emergency notification capabilities, as well as pre-established evacuation procedures. It is also essential to conduct regular, periodic exercises involving these two emergency plan elements to evaluate readiness and to identify and remediate any planning or training gaps to ensure ongoing emergency incident readiness and effectiveness.

Hazardous Material Service Demand

The service area experienced 218 hazardous material incidents over the three-year study period, comprising 0.98 percent of total service demand over the same period, as summarized in the following tables.

Table 30—Hazardous Material Service Demand

Hazard	Year	Planning Zone		Total	Percent Total Annual Service Demand
		Station 1	Station 2		
Hazardous Material	2020	29	35	**64**	0.91%
	2021	34	39	**73**	0.98%
	2022	2	58	**81**	1.05%
	Total	**86**	**132**	**218**	0.98%
Percent of Total Station Service Demand		.064%	1.50%		

As the table shows, increasing hazardous material service demand over the three-year study period by 21 percent.

Hazardous Material Risk Assessment

The following table summarizes Citygate's assessment of hazardous material risk by planning zone.

Table 31—Hazardous Material Risk Assessment

Hazardous Materials Risk	Planning Zone	
	Station 1	Station 2
Probability of Occurrence	*Probable*	*Probable*
Probable Impact Severity	*Moderate*	*Moderate*
Overall Risk	***Moderate***	***Moderate***

A.1.14Technical Rescue Risk

Technical rescue risk factors include active construction projects; structural collapse potential; confined spaces, such as tanks and underground vaults; bodies of water, including rivers and streams; industrial machinery use; transportation volume; and earthquake, flood, and landslide potential.

Construction Activity

There is ongoing residential, commercial, industrial, and infrastructure construction activity within the service area.

Confined Spaces

There are multiple confined spaces within the service area, including tanks, vaults, and open trenches.

Bodies of Water

The service area borders the Mississippi River and includes the 5.8-mile Mississippi River Trail system. Waterside recreation areas include Kaposia Landing, Wildflower Levee Park and the Department of Natural Resources launch area.

Transportation Volume

Another technical rescue risk factor is transportation-related incidents requiring technical rescue. This risk factor is primarily a function of vehicle, railway, maritime, and aviation traffic. Vehicle traffic volume is the greatest of these factors within the service area, with Highways 52 and 494 carrying an aggregate annual average daily traffic volume of more than 167,000 vehicles.[16]

Flood Risk

Many areas of the service area are subject to flooding from various causes.

Technical Rescue Service Demand

The Department responded to 36 technical rescue incidents over the three-year study period, comprising 0.16 percent of total service demand for the same period, as summarized in the following tables.

[16] Source: Source: Minnesota Department of Transportation Traffic Mapping Application 2022 data: Traffic Mapping Application (arcgis.com)

Table 32—Technical Rescue Service Demand

Hazard	Year	Planning Zone		Total	Percent Total Annual Service Demand
		Station 1	Station 2		
Technical Rescue	2020	4	5	**9**	0.13%
	2021	5	5	**10**	0.13%
	2022	13	4	**17**	0.22%
	Total	**22**	**14**	**36**	0.16%
Percent of Total Station Service Demand		0.16%	0.16%		

As the table shows, overall service area technical rescue service demand is low but increased by doubled over the three-year study period.

Technical Rescue Risk Assessment

The following table summarizes Citygate's assessment of technical rescue risk by planning zone.

Table 33—Technical Rescue Risk Assessment

Technical Rescue Risk	Planning Zone	
	Station 1	Station 2
Probability of Occurrence	*Possible*	*Possible*
Probable Impact Severity	*Moderate*	*Moderate*
Overall Risk	***Moderate***	***Moderate***

A.1.15 Marine Incident Risk

Marine incident risk factors include waterway and near-shore recreational activities and watercraft storage and use in or on waterways within the service area.

Waterways

Bodies of water and waterways within the service area include approximately six miles of the Mississippi River.

Recreational Activity

The service area's waterways are popular for water recreation activities, including fishing, paddle boarding, kayaking, etc.

Watercraft/Vessel Activity

In addition to smaller fishing and recreational boats and personal watercraft, bulk carriers and barges are utilized at the Dakota Bulk Terminal.

Marine Incident Service Capacity

The Department's marine safety service capacity includes one watercraft—a 28-foot landing craft-style boat equipped with a 350-gallon-per minute-pump housed at Station 2.

Marine Incident Service Demand

Over three-year study period, the Department responded to nine marine incidents, comprising 0.04 percent of total service demand for the same period, as summarized in the following tables.

Table 34—Marine Incident Service Demand

Hazard	Year	Planning Zone		Total	Percent Total Annual Service Demand
		Station 1	Station 2		
Marine Incident	2020	-	5	**5**	0.07%
	2021	-	5	**2**	0.03%
	2022	-	2	**2**	0.03%
	Total	**-**	**9**	**9**	0.04%
Percent of Total Station Service Demand		-	0.10%		

As the table shows, overall service area marine incident service demand is very low over the three-year study period.

Marine Risk Assessment

The following table summarizes Citygate's assessment of marine incident risk by planning zone.

Table 35—Marine Incident Risk Analysis

Marine Incident Risk	Planning Zone	
	Station 1	Station 2
Probability of Occurrence	*Rare*	*Possible*
Probable Impact Severity	*Minor*	*Minor*
Overall Risk	***Low***	***Low***

SOUTH METRO FIRE DEPARTMENT

1650 Humboldt Avenue • West St. Paul MN 55118
Phone: (651) 552-4176 • FAX: (651) 552-4195
www.southmetrofire.com

DATE: December 20, 2023

TO: President and Board

FROM: Mark Juelfs, Fire Chief

RE: Property/Casualty Insurance Renewal

Summary:
Working with WA Group representatives, we received the renewal rates for our property, casualty, cyber, and MHealth excess liability coverage policies from the LMCIT.

Below is a chart detailing the premium changes for 2024. Lowering the excess liability coverage amount had a significant impact in reducing our overall insurance costs for 2024.

Coverage	LMC Expiring Premium	LMC Renewal Premium	$ Change	% Change
Property Package	**$963.00**	**$1,163.00**	**$200.00**	**20.77%**
Mobile Property	**$100.00**	**$100.00**	**$0.00**	**0.00%**
1st Party Cyber	**$2,912.00**	**$2,912.00**	**$0.00**	**0.00%**
Municipal Liability	**$12,451.00**	**$11,832.00**	**($619.00)**	**-4.97%**
Auto Liability	**$1,039.00**	**$1,152.00**	**$113.00**	**10.88%**
Auto Physical Damage	**$4,801.00**	**$5,471.00**	**$670.00**	**13.96%**
Bond	**$244.00**	**$253.00**	**$9.00**	**3.69%**
Excess Liability	**$10,997.00**	**$10,903.00**	**($94.00)**	**-0.85%**
Total Premium	**$33,507.00**	**$33,786.00**	**$279.00**	**0.83%**

Budget Impact:
Overall, the premium renewal costs for 2024 are within our budgeted amount.

Recommendations:
Authorize staff to make payments in accordance with the premium renewal notices.

Attachments:
Renewal Summary

SOUTH METRO FIRE DEPARTMENT

1650 Humboldt Avenue • West St. Paul MN 55118
Phone: (651) 552-4176 • FAX: (651) 552-4195
www.southmetrofire.com

DATE: December 20, 2023

TO: President and Board

FROM: Mark Juelfs, Fire Chief

RE: 2024 Budget Adoption

Summary:
Earlier this year, a 2024 Budget was drafted utilizing a process that included input from the Department Administration and the Board. On May 17th, the preliminary budget was approved by the Board and forwarded to both Cities. The attached resolution formalizes the approval of the 2024 budget.

Recommendation:
Approve Resolution 2023-10 Approving 2023 Budget

Attachments:
2024 Budget Overview
2024 CEP
Resolution 2023-10 Approving 2024 Budget

2024 Preliminary Budget

5/8/2023

General Fund

	Budget 2021	Budget 2022	Budget 2023	Proposed 2024	Change 2024-2023%	Change 2024-2023
General Fund						
Revenues						
Ambulance Services (34205)	$ 559,480	$ 586,150	$ 685,672	$ 712,002	3.8%	$ 26,330
Fire Services (34956)	$ 17,515	$ 18,052	$ 22,300	$ 22,300	0.0%	$ -
Charges for Services - South St Paul (34961)	$ 2,499,873	$ 2,627,078	$ 2,627,078	$ 2,627,078	0.0%	$ 0
Charges for Services - West St Paul (34960)	$ 2,499,873	$ 2,627,078	$ 2,627,078	$ 2,627,078	0.0%	$ 0
EMS Taxing District Revenue (31000, 31020, 31040,31910)	$ 550,000	$ 825,000	$ 1,209,952	$ 1,938,696	60.2%	$ 728,744
Other Revenue	$ 233,534	$ 248,589	$ 330,316	$ 293,666	-11.1%	$ (36,650)
State Fire Aid (33420)	$ 183,534	$ 198,589	$ 230,612	*$ 243,666*	*5.7%*	*$ 13,054*
Insurance Dividend (36235)	$ 15,000	$ 15,000	$ 15,000	*$ 15,000*	*0.0%*	*$ -*
Other Revenue (33455, 33499, 33699, 36210, 36230, 3623€	$ 35,000	$ 35,000	$ 85,000	*$ 35,000*	*-58.8%*	*$ (50,000)*
Total Revenues	$ 6,360,274	$ 6,931,947	$ 7,502,693	$ 8,220,820	9.6%	$ 718,127

	Budget 2021	Budget 2022	Budget 2023	Proposed 2024	Change 2024-2023%	Change 2024-2023
Expenditures						
Personal Services						
Salaries - Regular (101)	$ 3,845,278	$ 4,144,203	$ 4,484,669	$ 4,905,124	9.4%	$ 420,455
Salaries - Overtime (102)	$ 285,624	$ 272,286	$ 302,315	$ 322,462	6.7%	$ 20,147
Staffing - Emergency Callback	*$ 21,203*	*$ 21,317*	*$ 22,659*	*$ 24,185*	*6.7%*	*$ 1,525*
Staffing - Maintain Minimum	*$ 100,494*	*$ 88,823*	*$ 94,415*	*$ 100,769*	*6.7%*	*$ 6,355*
Staffing - National Guard/Reserve	*$ 10,602*	*$ 5,329*	*$ 5,665*	*$ 6,046*	*6.7%*	*$ 381*
Fire Prevention Division	*$ 13,650*	*$ 16,210*	*$ 17,231*	*$ 18,390*	*6.7%*	*$ 1,160*
Operations - DCSOT/MN-TF1	*$ 14,312*	*$ 14,389*	*$ 15,295*	*$ 21,766*	*42.3%*	*$ 6,471*
Admin - Annual Department Meeting/Training	*$ 17,050*	*$ 17,142*	*$ 23,698*	*$ 25,293*	*6.7%*	*$ 1,595*
EMS Training	*$ 27,829*	*$ 29,578*	*$ 32,290*	*$ 18,138*	*-43.8%*	*$ (14,151)*
Operational Training	*$ 76,419*	*$ 77,543*	*$ 88,042*	*$ 107,874*	*22.5%*	*$ 19,832*
Severance Pay (111)			$ 10,000	$ 10,000	*0.0%*	*$ -*
Sick Leave Buyout (112)	$ 47,680	$ 51,417	$ 56,718	$ 58,487	3.1%	$ 1,769
PERA (121)	$ 723,850	$ 774,179	$ 839,030	$ 916,220	9.2%	$ 77,190
FICA & Medicare (122)	$ 64,347	$ 68,622	$ 74,436	$ 81,309	9.2%	$ 6,873

Insurance - Medical, Dental, Life (131)	$	514,031	$	554,221	$	560,965	$	629,847	12.3%	$ 68,882
Worker's Compensation Premium (151)	$	171,983	$	267,422	$	312,074	$	378,023	21.1%	$ 65,949
Worker's Compensation Deductible (152)	$	15,000	$	20,000	$	20,000	$	20,000	0.0%	$ -
Supplies										
Office Supplies (200)	$	11,965	$	11,965	$	11,965	$	13,740	14.8%	$ 1,775
General Supplies	*$*	*6,000*	*$*	*6,000*	*$*	*6,000*	*$*	*6,000*	*0.0%*	*$ -*
Fire Code Books	*$*	*240*	*$*	*240*	*$*	*240*	*$*	*240*	*0.0%*	*$ -*
Training Manuals	*$*	*1,000*	*$*	*1,000*	*$*	*1,000*	*$*	*1,000*	*0.0%*	*$ -*
Public Education Materials	*$*	*1,725*	*$*	*1,725*	*$*	*1,725*	*$*	*3,500*	*102.9%*	*$ 1,775*
Department Meeting Expenses	*$*	*3,000*	*$*	*3,000*	*$*	*3,000*	*$*	*3,000*	*0.0%*	*$ -*
Fuel (212)	$	50,914	$	50,914	$	51,675	$	67,734	31.1%	$ 16,059
Unleaded Gasoline	*$*	*31,200*	*$*	*31,200*	*$*	*35,775*	*$*	*46,110*	*28.9%*	*$ 10,335*
Diesel Fuel	*$*	*19,714*	*$*	*19,714*	*$*	*15,900*	*$*	*21,624*	*36.0%*	*$ 5,724*
Uniforms (217)	$	35,075	$	36,150	$	36,900	$	38,100	3.3%	$ 1,200
Equipment Parts (220)	$	19,500	$	19,500	$	15,000	$	21,500	43.3%	$ 6,500
Building Supplies (223)	$	6,800	$	6,800	$	6,250	$	7,500	20.0%	$ 1,250
General Supplies (230)	$	20,050	$	21,050	$	24,950	$	24,950	0.0%	$ -
Firefighting Consumables	*$*	*4,850*	*$*	*4,850*	*$*	*5,350*	*$*	*5,350*	*0.0%*	*$ -*
EMS Consumables	*$*	*10,600*	*$*	*11,600*	*$*	*14,100*	*$*	*14,100*	*0.0%*	*$ -*
General Supplies	*$*	*4,600*	*$*	*4,600*	*$*	*5,500*	*$*	*5,500*	*0.0%*	*$ -*
Minor Equipment (240)	$	33,975	$	57,975	$	34,375	$	41,175	19.8%	$ 6,800
Firefighting Equipment	*$*	*21,100*	*$*	*49,100*	*$*	*25,500*	*$*	*28,300*	*11.0%*	*$ 2,800*
EMS Equipment	*$*	*1,000*	*$*	*1,000*	*$*	*1,000*	*$*	*5,000*	*400.0%*	*$ 4,000*
Station Equipment	*$*	*7,875*	*$*	*7,875*	*$*	*7,875*	*$*	*7,875*	*0.0%*	*$ -*
Other Services & Charges										
Training, Conferences & Schools (310)	$	57,800	$	63,800	$	63,080	$	69,930	10.9%	$ 6,850
Professional Development	*$*	*20,500*	*$*	*20,500*	*$*	*20,500*	*$*	*22,200*	*8.3%*	*$ 1,700*
Operational Training	*$*	*31,950*	*$*	*37,950*	*$*	*37,930*	*$*	*43,080*	*13.6%*	*$ 5,150*
Prevention & Enforcement Training	*$*	*5,350*	*$*	*5,350*	*$*	*4,650*	*$*	*4,650*	*0.0%*	*$ -*
Communications (320)	$	51,200	$	52,100	$	56,200	$	55,400	-1.4%	$ (800)
Responder Notification	*$*	*1,500*	*$*	*1,500*	*$*	*1,500*	*$*	*700*	*-53.3%*	*$ (800)*
Cell Phones/Air Cards/Stipends	*$*	*16,500*	*$*	*16,500*	*$*	*18,500*	*$*	*18,500*	*0.0%*	*$ -*
Radio User Fees	*$*	*21,300*	*$*	*22,200*	*$*	*22,800*	*$*	*22,800*	*0.0%*	*$ -*
CAD Mobile Fees	*$*	*3,600*	*$*	*3,600*	*$*	*3,600*	*$*	*3,600*	*0.0%*	*$ -*
Station Alerting License	*$*	*8,300*	*$*	*8,300*	*$*	*8,300*	*$*	*8,300*	*0.0%*	*$ -*
Station Alerting Maintenance Fee					*$*	*1,500*	*$*	*1,500*	*0.0%*	*$ -*
General Liability Insurance (361)	$	37,096	$	42,166	$	57,000	$	40,500	-28.9%	$ (16,500)
Auto Fleet	*$*	*18,857*	*$*	*20,004*	*$*	*6,000*	*$*	*6,500*	*8.3%*	*$ 500*

Property Package	*$ 18,239*	*$ 22,163*	*$ 1,000*	*$ 1,000*	*0.0%*	*$ -*
Municipal Liability			*$ 12,000*	*$ 13,000*	*8.3%*	*$ 1,000*
HealthEast Excess Coverage			*$ 30,000*	*$ 12,000*	*-60.0%*	*$ (18,000)*
Data Breech Coverage	*$ -*	*$ -*	*$ 3,000*	*$ 3,000*	*0.0%*	*$ -*
Deductible			*$ 5,000*	*$ 5,000*	*0.0%*	*$ -*
Professional Services (398)	$ 236,347	$ 252,818	$ 249,948	$ 261,975	4.8%	$ 12,027
Financial Services - Audit, etc.	*$ 17,650*	*$ 17,900*	*$ 19,200*	*$ 19,450*	*1.3%*	*$ 250*
SMF Board Member Compensation	*$ 6,000*	*$ 6,000*	*$ 6,000*	*$ 6,000*	*0.0%*	*$ -*
HealthEast Administrative Support	*$ 27,685*	*$ 29,052*	*$ 33,516*	*$ 33,516*	*0.0%*	*$ -*
Legal Services	*$ 8,000*	*$ 8,000*	*$ 8,000*	*$ 8,000*	*0.0%*	*$ -*
Dispatch Services	*$ 145,757*	*$ 137,746*	*$ 133,009*	*$ 133,009*	*0.0%*	*$ -*
Copier Lease and Maintenance	*$ 2,000*	*$ 2,000*	*$ 2,000*	*$ 3,200*	*60.0%*	*$ 1,200*
Annual Medical Review/Fit Testing/Mantoux	*$ 14,505*	*$ 18,820*	*$ 20,273*	*$ 21,850*	*7.8%*	*$ 1,577*
Employee Assistance Program	*$ 750*	*$ 750*	*$ 750*	*$ 750*	*0.0%*	*$ -*
Par360 and Mental Health Checkups			*$ 18,000*	*$ 18,000*	*0.0%*	*$ -*
Firefighter Background Check			*$ 3,200*	*$ 3,200*	*0.0%*	*$ -*
Leadership Training			*$ 6,000*	*$ 15,000*	*150.0%*	*$ 9,000*
Grant Writing Services	*$ -*	*$ -*	*$ -*	*$ -*	*#DIV/0!*	*$ -*
Software / IT Support (401)	$ 47,183	$ 79,683	$ 113,238	$ 126,240	11.5%	$ 13,002
Fire/EMS Records Management Licensing	*$ 11,150*	*$ 11,150*	*$ 10,600*	*$ 10,600*	*0.0%*	*$ -*
LOGIS Server Contract & Support	*$ 19,245*	*$ 19,245*	*$ 25,350*	*$ 28,350*	*11.8%*	*$ 3,000*
Software & Applications	*$ 16,788*	*$ 49,288*	*$ 77,288*	*$ 87,290*	*12.9%*	*$ 10,002*
Equipment Maintenance (404)	$ 71,420	$ 71,420	$ 96,398	$ 112,198	16.4%	$ 15,800
Vehicle & Equipment Repair	*$ 53,250*	*$ 53,250*	*$ 58,250*	*$ 72,250*	*24.0%*	*$ 14,000*
Annual Equipment Certification & Testing	*$ 11,770*	*$ 11,770*	*$ 38,148*	*$ 39,948*	*4.7%*	*$ 1,800*
Certifications & Memberships (433)	$ 12,331	$ 12,431	$ 24,681	$ 17,581	-28.8%	$ (7,100)
Licensing & Certifications	*$ 6,605*	*$ 6,655*	*$ 18,805*	*$ 12,100*	*-35.7%*	*$ (6,705)*
Professional Memberships	*$ 5,081*	*$ 5,131*	*$ 5,231*	*$ 5,481*	*4.8%*	*$ 250*
Operational Expenses (490)	$ 825	$ 825	$ 825	$ 825	0.0%	$ -
Kitchen Fire Trailer Rental	*$ 825*	*$ 825*	*$ 825*	*$ 825*	*0.0%*	*$ -*
Total Expenditures	$ 6,360,274	$ 6,931,947	$ 7,502,693	$ 8,220,820	9.6%	$ 718,128

South Metro Fire Department

2024 Final Budget

12/11/2023

Per City Contribution	$ 2,656,711	$ 2,796,919	$ 2,812,521	$ 2,832,744	0.7%	$ 20,223

	Budget 2021	Budget 2022	Budget 2023	Proposed 2024	Change 2024-2023%	Change 2024-2023
General Fund						
Revenues						
Ambulance Services	$ 559,480	$ 586,150	$ 685,672	$ 763,367	11.3%	$ 77,695
Fire Services *(Permit Fees)*	$ 17,515	$ 18,052	$ 22,300	$ 22,300	0.0%	$ -
Charges for Services *(Cities)*	$ 4,999,745	$ 5,254,156	$ 5,254,156	$ 5,254,156	0.0%	$ (0)
EMS Taxing District Revenue	$ 550,000	$ 825,000	$ 1,209,952	$ 1,938,696	60.2%	$ 728,744
Other Revenue	$ 233,534	$ 248,589	$ 330,316	$ 293,666	-11.1%	$ (36,650)
Total Revenues	$ 6,360,274	$ 6,931,947	$ 7,502,396	$ 8,272,184	10.3%	$ 769,788
Expenditures						
Personal Services *(Salaries, Overtime, Insurance, Work Comp)*	$ 5,667,793	$ 6,152,350	$ 6,660,208	$ 7,332,449	10.1%	$ 672,241
Supplies *(Operational, Fuel, Minor Equipment)*	$ 178,279	$ 204,354	$ 181,115	$ 232,677	28.5%	$ 51,562
Other Services & Charges *(Operational, Professional Services, Equipment Maintenance)*	$ 514,202	$ 575,243	$ 661,370	$ 707,058	6.9%	$ 45,688
Total Expenditures	$ 6,360,274	$ 6,931,947	$ 7,502,693	$ 8,272,184	10.3%	$ 769,492
Capital Fund						
Revenues						
Charges for Services *(Cities)*	$ 130,026	$ 156,031	$ 187,236	$ 224,683		
Total Revenues	$ 130,026	$ 156,031	$ 187,236	$ 224,683	20%	$ 37,447
Expenditures						
Motor Vehicles	$ 301,862	$ 1,317,000	$ 102,557	$ 367,000	257.8%	$ 264,443
Other Equipment	$ 9,000	$ 37,725	$ 111,000	$ 208,700	88.0%	$ 97,700
Office Equipment	$ 86,414	$ 72,300	$ 89,583	$ 77,302	-13.7%	$ (12,281)
Total Expenditures	$ 397,276	$ 1,427,025	$ 303,140	$ 653,002	115.4%	$ 349,862
Debt Service Fund						
Revenues						
Charges for Services *(Cities)*	$ 183,650	$ 183,650	$ 183,650	$ 186,650		
Total Revenues	$ 183,650	$ 183,650	$ 183,650	$ 186,650	1.6%	$ 3,600
Expenditures						
Lease Purchase - 2010 Fire Engines		$ -	$ -	$ -	0.0%	$ -
Lease Purchase - 2014 Ambulance	$ 183,650	$ -	$ -	$ -	0.0%	$ -
Lease Purchase - 2020 Fire Engines	$ -	$ -	$ 183,650	$ 186,650	0.0%	$ -
Total Expenditures	$ 183,650	$ 183,650	$ 183,050	$ 186,650	2.0%	$ 3,600
Grant Fund						
Revenues						
Federal Grants	$ -	$ -	$ -	$ -		
State Grants	$ -	$ -	$ -	$ -		
Other Grants	$ 3,300		$ -	$ -		
Total Revenues	$ 3,300		$ -	$ -		
Expenditures						
Personal Services	$ -		$ -	$ -		
Supplies	$ -		$ -	$ -		
Other Services & Charges	$ 3,300		$ -	$ -		
Total Expenditures	$ 3,300		$ -	$ -		
Scholarship Fund						
Revenues						
Donations	$ -	$ -	$ -	$ -		
Total Revenues	$ -	$ -	$ -	$ -		
Expenditures						
Supplies	$ -	$ -	$ -	$ -		
Other Services & Charges	$ 625	$ 1,454	$ 2,500	$ 2,500		
Total Expenditures	$ 625	$ 1,454	$ 2,500	$ 2,500		

Capital Level	Capital Fund	Replacement Cycle (Yrs)	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
	Budget Revenue		$187,236	$ 224,683	$ 269,620	$ 323,544	$ 388,253	$ 465,903	$ 559,084	$ 587,038	$ 616,390	$ 647,209	$ 679,570
	General Fund Balance Transfer		$100,901	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000
	Capital Fund Balance January 1st		$639,648	$ 624,645	$ 296,326	$ 587,200	$ 369,605	$ 631,413	$ 634,102	$ 870,532	$ 967,002	$ 844,697	$ 133,729
Level 3	Engine 1	10								$ 1,278,682			
	Engine 2	10								$ 1,278,682			
	Ladder 1	25											
	Ladder 2	25											
Level 2	Ambulance 2	6		$ 325,000						$ 435,531			
	Ambulance 1	6						$ 376,000					
	Ambulance 3	6				$ 358,000						$ 479,754	
	Boat 2	30											
Level 1	Utility 1	15									$ 113,139		
	Utility 2	15											
	Inspector (Pickup)	15					$ 73,873						
	Chief 1 (SUV-Short)	10				$ 70,355							
	Chief 3(SUV-Short)	10				$ 70,355							
	Chief 2 (SUV Long) - 2 (6 as Ch2 -6 as Chief 4)	6	$ 70,195						$ 94,068				
	Chief 4 (SUV Long)	10											
	Inspector (Car)	10		$ 35,000									
	Command Module - Chief 2	6	$ 6,862						$ 9,196				
	Command Module - Chief 3	10				$ 7,719							
	Topper for Utility Vehicle	15	$ 3,500										
	Brush 2	15					X						
	Utility Trailer	20										X	
	Zodiac	15		$ 7,000									
	Boat Motors	15					$ 22,000						
	SCBA	13									$ 612,836		
	Rapid Diver Equipment	10									$ 16,431		
	Turnout Gear	1	$ 42,000	$ 200,000	$ 25,410	$ 32,166	$ 33,612	$ 35,298	$ 265,611	$ 38,500	$ 40,040	$ 41,642	$ 43,307
	Helmets	1	$ 4,500	$ 4,700	$ 4,888	$ 5,084	$ 5,287	$ 5,498	$ 5,718	$ 5,947	$ 6,185	$ 6,432	$ 6,690
	Boots	10											
	Ballistic Vests	10						$ 37,006					
	Firefighter Self-Rescue Equipment	10				$ 19,500							
	Ladder 1 Equipment		$ 45,000										
	Fire Hose		$ 12,000	$ -									
	Thermal Imagers	4				$ 26,002				$ 30,419			
	Individual Thermal Imagers												
	Air Bags	10								$ 30,493			
	Rope Rescue Equipment	10					$ 20,300						
	Extrication Equipment - Ambulances	10					$ 45,000						
	Hose Tester	10											
	Monitoring	10		$ 2,000				$ 34,066					
	AEDs	3	$ 5,000	$ 2,000	$ 15,183			$ 17,079			$ 19,211		
	LUCAS Device (4)												
	Power Cots - A1 & A2	7											
	Power Loading - A1 & A2	7											
	Power Stair Chair	10											
	Training Props	2		$ 8,857		$ 9,580		$ 10,361		$ 11,207		$ 12,121	
	Training Manikins	10											
	Beds	8	$ 3,000	$ 8,540	$ 8,882							$ 11,688	$ 12,156
	Chairs	6	$ 7,000					$ 7,592	$ 8,857				
	Office Furniture	2		$ 6,959		$ 7,527		$ 8,141		$ 8,805		$ 9,524	
	Appliances - stoves, refrig, washer/dryer			$ 4,500									
	Gear Washer	15											$ 16,901
	Gear Dryer	15											
	Gear Lockers		$ 2,500										
	SCBA Equipment Washer	15											
	SCBA Compressor & Fill Station	20											
	Vehicle Exhaust Collection System												
	Fitness Equipment	3	$ 8,439			$ 9,493			$ 10,678			$ 12,011	
	Station Alerting	15										$ 270,142	
	Investigation - Camera	5	$ 3,900					$ 4,745					$ 5,773
	Computers	4	$ 12,897	$ 18,413	$ 13,949	$ 14,507	$ 15,087	$ 15,691	$ 16,318	$ 16,971	$ 17,650	$ 18,356	$ 19,090
	Mobile Computers	4	$ 13,847	$ 10,033	$ 10,434	$ 10,852	$ 11,286	$ 11,737	$ 12,207	$ 12,695	$ 13,203	$ 13,731	$ 14,280
	800 MHz Radio - mobile & portable	13	$ 32,000									$ 582,776	
	Boat Electronics	10	$ 22,000										$ 32,565
	Boat Motors	15											
	LaserFiche Document System	10											
	Payroll Software	10											
	New World Add-ons		$ 8,500										
	Office 365 Transition			$ 20,000									
	Website/Social Media												
	Total		$ 303,140	$ 653,002	$ 78,746	$ 641,139	$ 226,445	$ 563,214	$ 422,653	$ 590,568	$ 838,695	$ 1,458,177	$ 150,762
	Year-End Capital Fund Balance		$ 624,645	$ 296,326	$ 587,200	$ 369,605	$ 631,413	$ 634,102	$ 870,532	$ 967,002	$ 844,697	$ 133,729	$ 762,537

SOUTH METRO FIRE DEPARTMENT

Resolution Number 2022-10

RESOLUTION ADOPTING THE 2024 BUDGET

WHEREAS, the Board submitted an approved 2024 gross budget to the City Councils of West St. Paul and South St. Paul, pursuant to the Joint Powers Agreement and the Services Agreement; and

WHEREAS, the South Metro Fire Department has not received comment from the Cities prior to September 15th as referenced in the Joint Powers Agreement; and

WHEREAS, the South St. Paul and West St. Paul City Councils have received the South Metro budget and have previously adopted their respective 2024 budgets, which supports the gross budget of South Metro.

NOW, THEREFORE, BE IT RESOLVED that the Board of Directors hereby approves the 2024 Budget and CEP for the South Metro Fire Department.

Passed by the Board of Directors on December 20, 2023.

Attest:

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Wendy Berry, Secretary