CITY COUNCIL MEETING

AGENDA January 30, 2023 7:00 pm City Council Chambers, City Hall 60 Pleasant Street, Newburyport

Global Update on 107 State Street 6:30 pm

Zoom details for City Council Meeting: <u>https://us02web.zoom.us/j/81299990548</u>

Or One tap mobile: US: +19292056099,81299990548# Or Telephone US: +1 929 205 6099 Webinar ID: 812 9999 0548

- 1. MOMENT OF SILENCE
- 2. CALL TO ORDER
- **3. PLEDGE OF ALLEGIANCE**
- 4. LATE FILE
- 5. SWEARING IN: OFFICER CARLEY SIEMASKO
- 6. PUBLIC COMMENT
- 7. MAYOR'S COMMENT

CONSENT AGENDA

NOTE: ALL ITEMS LISTED UNDER CONSENT AGENDA WILL BE ENACTED BY ONE MOTION. THERE WILL BE NO SEPARATE DISCUSSION OF THESE ITEMS. IF DISCUSSION IS DESIRED, THAT ITEM WILL BE REMOVED FROM THE CONSENT AGENDA AND CONSIDERED SEPARATELY.

8.	APPROVAL OF MINUTESJanuary 09, 2023		(Approve)
9.	COMMUNICATIONS		
	• COMM00458 01 30 2023	FY2023 Mid-Year Budget Report	(B&F)
	• COMM00459 01 30 2023	Ltr. Residents concerned with speeding on Arlington St.	(PW&S)
	• COMM00460_01_30_2023	Letters of Support for Parks Plan	(CS)
10.	TRANSFERS		
	• TRAN00147_01_30_2023	Fire Dept.: General Fund-Free Cash \$164,891 to Salary Fire Chief \$80,845, Firefighter Overtime \$75,000, and Emergency Mgt. Dir. \$9,046	(B&F)
	• TRAN00148 01 30 3023	Mayor: RRFA Sale of Municipal Buildings \$200,000 to	(B&F)
		NYS Center Design Services \$200,000 (with EGA Architects Propose	al)
11.	APPOINTMENTS		

٠	APPT00368 01 30 2023	Kim Emmons	9 Doe Run Dr.	Water/Sewer Comm.	2/1/2025	(PW&S)

- *Re-Appointments:*
- APPT00369_01_30_2023 Carole Wagan
- APPT00370_01_30_2023 David Vine
- APPT00372_01_30_2023 Ethan Manning
- APPT00373_01_30_2023 KP Law
- APPT00374 01 30 2023 Karen Wiener

Confirmatory:

• APPT00376 01 30 2023 Jennifer Blanchet 4 Island Lane Zoning Administrator 12/31/2024 (P&D)

7 Lincoln St.

9 Olive St.

47 Marlboro St.

101 Arch St. Boston City Solicitor

31 Howard St.

Conservation Comm.

Dir. of Fin./City Auditor 2/1/2026

Affordable Housing Trust 2/1/2025

Conservation Comm

2/1/2025

2/1/2025

(P&D)

(P&D)

(B&F)

(P&D)

2/1/2024 (GG & COTW)

ALL ITEMS NOTED BELOW ARE <u>REMOVED</u> FROM THEIR RESPECTIVE COMMITTEES WITH THE MOTION TO APPROVE THE CONSENT AGENDA

BUDGET & FINANCE

٠	ORDR00409_01_09_2023	Cutter West End Fire Station Loan Order (COTW) (with CBRE Project update)
٠	TRAN00146_01_09_2023	DPS: Receipts Reserved for Appr. Fuel \$125,000 to
		DPS Highway Fuel & Oil \$125,000
٠	TRAN00145_01_09_2023	Finance: General Fund-Free Cash \$10,741 to
		Essex North Shore Tech School \$10,741
٠	ORDR00404_01_09_2023	Pay Prior Year Bills
٠	ORDR00402_12_12_2022	Belleville Improvement Society Gift Acceptance
٠	ORDR00403_12_12_2022	Central Congregational Church Gift Acceptance
٠	ORDR00400_12_12_2022	Morrill Foundation Gift Acceptance
٠	ORDR00405_01_09_2023	FoNT Gift Acceptance
٠	ORDR00406_01_09_2023	SAGA Gift Acceptance
٠	ORDR00407_01_09_2023	Goldy Sculpture Gift Acceptance
٠	ORDR00408_01_09_2023	3 Cardinals in a Tree Sculpture Gift Acceptance
٠	ORDR00411 01 09 2023	FY2023 COLA Increase
•	ORDR00412_01_09_2023	COLA Base Increase

GENERAL GOVERNMENT

Amend to Municipal Fees Schedule Passport Photos

LICENSES & PERMITS

- 2nd Hand Motor Vehicle License LCA Motors
- 2nd Hand Motor Vehicle License Plum Autoworks

COMMUNITY SERVICES

 APPT00367_01_09_2023
 Lina Matta
 7 Everett Dr.
 Board of Health
 2/1/2026

PUBLIC WORKS & SAFETY

Snow Emergency Parking Auburn St

Amend to Ch 13-180 Inn Street

- Asphalt sidewalk waiver request package West End Fire Station project
- ORDR00399_12_12_2022
 ODNC00133 01 09 2023

ORDR00398 12 12 2022

ODNC00134 01 09 2023

APPL00119 01 09 2023

APPL00120 01 09 2023

- ORDR00410 01 09 2023
- Screening Cmte Fire Chief

END OF CONSENT AGENDA

REGULAR AGENDA

9. MAYOR'S UPDATE

10. FIRST READING APPOINTMENTS

Re-Appointment:

• APPT00371 01 30 2023 Susanne Marzi Cameron 17 Hancock St. Affordable Housing Trust 2/1/2025

Temporary:

• APPT00375 01 30 2023 Jamie Tuccolo 19 Quentin Dr. Temp. Dir. DPS 4/16/2023

11. COMMUNICATIONS

12. TRANSFERS

13. SECOND READING APPOINTMENTS

•	APPT00361_01_09_2023	Alice Sheridan	11 Beck St.	Council on Aging	2/1/2028
•	APPT00362_01_09_2023	Paul E. Bushey	1Dennett Dr.	Council on Aging	2/1/2028
•	APPT00364_01_09_2023	Ben Harman	298 High St.	Human Rights Comm.	1/30/2026
•	APPT00365_01_09_2023	Shane Cough	70 High St.	Human Rights Comm.	1/30/2026

14. ORDERS

٠	ORDR00413_01_30_2023	Parking Garage Inn Permit Fee
•	ORDR00414 01 30 2023	Rotary Club Gift Acceptance

- Rotary Club Gift Acceptance Brown School Ad Hoc Update
- ORDR00415 01 30 2023 Newburyport Multi-Hazard Mitigation Plan 2022
- ORDR00416 01 30 2023
- ORDR00417 01 30 2023 •
- ORDR00418 01 30 2023 •
- ORDR00419 01 30 2023

15. ORDINANCES

•

ODNC00135 01 30 2023 Zoning Amendment ITIF Remove Residential Use

Resolution Pete Pollard

Parks Reorganization Plan

Resolution Purple Heart City

- ODNC00136 01 30 2023 General Code Amendment Planning Board Membership
- ODNC00137 01 30 2023 Zoning Amendment Planning Board Membership

16. COMMITTEE ITEMS

Ad Hoc Committee on Adaptive Reuse of Brown School Property In Committee:

Ad Hoc Committee on Market Landing Park and COTW

In Committee:

• ORDR00389 11 01 2022 Naming Rights Market Landing Park

Budget & Finance

In Committee:

- ORDR00409 01 09 2023 **Cutter West End Fire Station Loan Order (COTW)**
- TRAN00146 01 09 2023 DPS: Receipts Reserved for Appr. Fuel \$125,000
- to DPS Highway Fuel & Oil \$125,000
- Finance: General Fund-Free Cash \$10,741 TRAN00145 01 09 2023

to Essex North Shore Tech School \$10,741

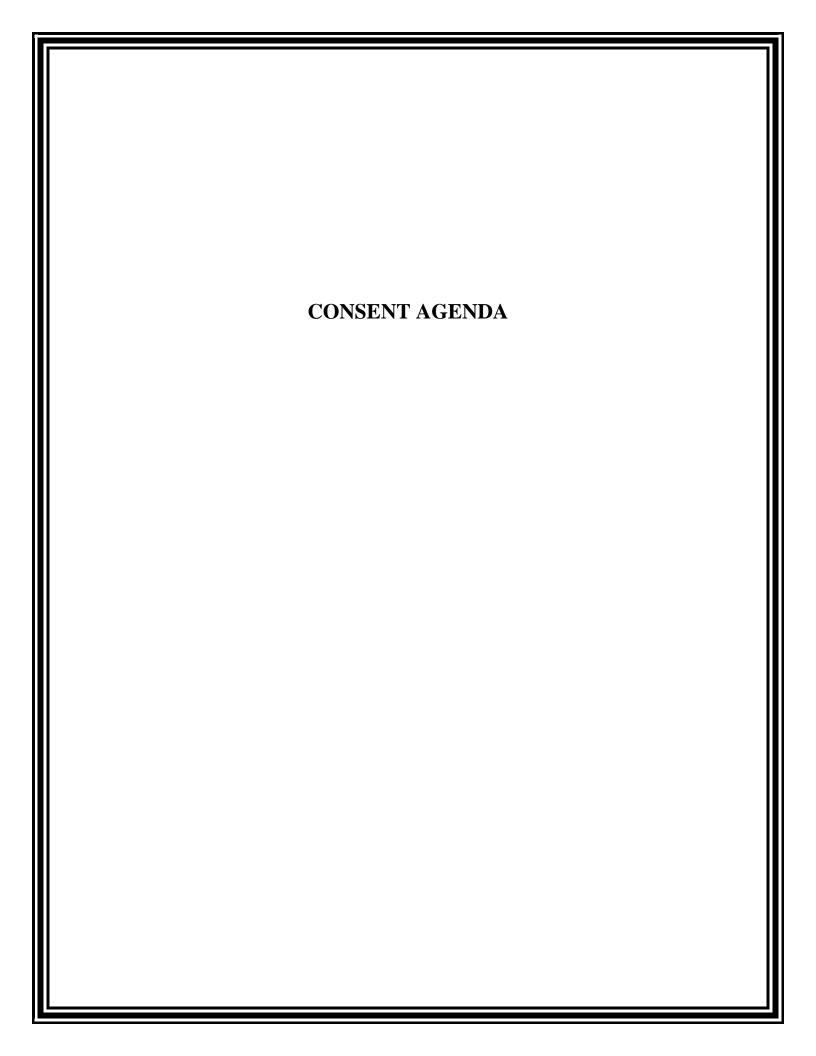
- **Pay Prior Year Bills** ORDR00404 01 09 2023 •
- ORDR00402 12 12 2022 **Belleville Improvement Society Gift Acceptance**
- ORDR00403 12 12 2022 **Central Congregational Church Gift Acceptance**
- **Morrill Foundation Gift Acceptance** ORDR00400 12 12 2022
- ORDR00405 01 09 2023 **FoNT Gift Acceptance**

•	ORDR00406 01 09 2023	SAGA Gift Acceptance			
٠	ORDR00407_01_09_2023	Goldy Sculpture Gift Acceptance			
•	ORDR00408_01_09_2023	3 Cardinals in a Tree Sculpture Gift Acceptance			
•	ORDR00411_01_09_2023	FY2023 COLA Increase			
•	ORDR00412_01_09_2023	COLA Base Increase			
•	ORDR00336_03_28_2022	ARPA Amesbury 250K (COTW)			
•	ODNC00129_11_01_2022	Defining Conflict Rule for Dept. Heads (COTW)			
•	ODNC00130 11 01 2022	Grants, Gifts, and Fees (COTW)			
•	ODNC00132 11 14 2022	Mandated Reporting			
•	ORDR00388 11 01 2022	NYS Facility Bond Order (COTW)			
•	COMM00443 11 01 2022	59 Low St. FAQs (COTW)			
•	ORDR00401 12 12 2022	Karen Jones Cashman Multi-Sport Court Gift Acceptance			
		1 1			
Gene	ral Government				
I	n Committee:				
•	ODNC00134_01_09_2023	Amend to Municipal Fees Schedule Passport Photos			
•	ORDR239_02_8_2021	Council Rule 7 and 10B			
	ises & Permits				
	In Committee:				
•	APPL00119 01 09 2023	2nd Hand Motor Vehicle License LCA Motors			
•	APPL00120_01_09_2023	2nd Hand Motor Vehicle License Plum Autoworks			
•	ODNC047_01_27_2020	General Ordinance - Short Term Rental Units Rules			
-					
	munity Services				
In	Committee:				
٠	<u>APPT00367_01_09_2023</u>	Lina Matta7 Everett Dr.Board of Health2/1/2026			
ы					
Plani	ning & Development In Committee:				
•	COMM00445_11_14_2022	59 Low Street Plan (COTW)			
•	COMM00455_12_12_2022	Net Zero report West End Fire Station			
3	^k Re-Appointment				
•	*APPT00363_01_09_2023	Jennifer Blanchet4 Island Ln., Newbury Zoning Admin. 12/31/23			
•	APPT00366_01_09_2023	Christopher Sawtelle 20 Summer St. Historical Comm. 2/1/2026			
Publi	ic Works & Safety				
	In Committee:				
•	ORDR00398 12 12 2022	Snow Emergency Parking Auburn St			
•	ORDR00399 12 12 2022	Asphalt sidewalk waiver request package - West End Fire Station project			
•	ODNC00133 01 09 2023	Amend to Ch 13-180 Inn Street			
•	ORDR00410 01 09 2023	Screening Cmte Fire Chief			
•	COMM00412_05_31_2022	Ltr Ann Jaroncyk re: Traffic Safety			
•	COMM00414_05_31_2022	Ltr. Emily Dunn re: Traffic on Merrimac Street			
•	COMM00456_12_12_2022	Letters re: Curb Cut 4 Wilkinson Dr. & 34 Hale St.			
•	ODNC00103 01 10 2022	Streets Sidewalks and Other Public Places Alterations & Maintenance			

• ODNC00103_01_10_2022 Streets, Sidewalks, and Other Public Places Alterations & Maintenance

17. GOOD OF THE ORDER

18. ADJOURNMENT



CITY COUNCIL MEETING

MINUTES

January 9, 2023 7:00 pm **City Council Chambers, City Hall 60** Pleasant Street, Newburyport

Executive Session

Zoom details for City Council Meeting: https://us02web.zoom.us/j/81299990548 Or One tap mobile: US: +19292056099,81299990548# Or Telephone US: +1 929 205 6099 Webinar ID: 812 9999 0548

1. CALL TO ORDER

7:00 pm City Clerk Richard B. Jones called the roll, the following City Councillors answered present: Vogel, Wallace, Wright, Zeid, Cameron, Donahue, Khan, Lane, McCauley, Preston, and Shand. 11 present.

2. ELECTION OF THE CITY COUNCIL PRESIDENT

Clerk Jones explained the process for the election and the vote was called. The following City Councillors cast a vote for Heather L. Shand as President on the first round: Vogel, Wallace, Wright, Zeid, Cameron, Donahue, Khan, Lane, McCauley, Preston, and Shand.

Heather L. Shand was unanimously voted in as City Council President. President Shand took her seat as President and continued the City Council meeting.

3. MOMENT OF SILENCE Remembering Walter Smith, Jr. and Brian Cashman.

- 4. PLEDGE OF ALLEGIANCE
- 5. LATE FILE
 - APPL00119 01 09 2023 2nd Hand Motor Vehicle License LCA Motors (L&P)
- APPL00120 01 09 2023 2nd Hand Motor Vehicle License Plum Autoworks (L&P) Motion to waive the rules and accept the Late Files by Councillor Zeid, seconded by Councillor Lane. So voted.

6. PUBLIC COMMENT

Jessica Stone 8 Doyle Dr.

- 9Coffin St. Jane Snow
- 7. MAYOR'S COMMENT

CONSENT AGENDA

NOTE: ALL ITEMS LISTED UNDER CONSENT AGENDA WILL BE ENACTED BY ONE MOTION. THERE WILL BE NO SEPARATE DISCUSSION OF THESE ITEMS. IF DISCUSSION IS DESIRED, THAT ITEM WILL BE REMOVED FROM THE CONSENT AGENDA AND CONSIDERED SEPARATELY.

8. APPROVAL OF MINUTES

	• December 12, 2022		(Approve)
9.		th Annual Frigid Fiver 2/12/2023 11am-1pm enda at the request of Councillor Vogel.	(L&P)
10.	. TRANSFERS • TRAN00145_01_09_2023 Fin	nance: General Fund-Free Cash \$10,741 to Essex North Shore Tech School \$10,741	(B&F)

TRAN00146_01_09_2023 DPS: Receipts Reserved for Appr. Fuel \$125,000 to DPS Highway Fuel & Oil \$125,000

11. APPOINTMENTS

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• APPT00361_01_09_2023 Alice Sheridan 11 Beck St. Council on Aging

• APPT00362_01_09_2023 Paul E. Bushey 1Dennett Dr. Council on Aging 2/1/2028 APPT00361, APPT00362, and APPT 00366 Removed from the Consent Agenda at the request of Councillor Preston.

*Re-Appointment

٠	*APPT00363_01_09_2023	Jennifer Blanchet	4 Island Ln., N	ewbury Zoning Admin.	. 12/31/23	(P&D)
	APPT00364_01_09_2023	Ben Harman	e	Human Rights Comm.		
•	APPT00365_01_09_2023	Shane Cough	70 High St.	Human Rights Comm.	1/30/2026	
•	APPT00366_01_09_2023	Christopher Sawtelle	20 Summer St.	Historical Commission	2/1/2026	
	APPT00361, APPT00362, an	nd APPT 00366 Remov	ed from the Con	sent Agenda at the reque	est of Councillor	Preston.
•	T00367_01_09_2023 Lina N	fatta 7 Ever	ett Dr. Board	of Health $2/1/202$	26	(CS)

ALL ITEMS NOTED BELOW ARE <u>REMOVED</u> FROM THEIR RESPECTIVE COMMITTEES WITH THE MOTION TO APPROVE THE CONSENT AGENDA

COMMUNITY SERVICES

- COMM299_02_08_2021 Phillips Dr. Neighborhood Committee Ltr
 ODNC00102_01_10_2022 Strate Sile and Other Dublic Direction Schericking Strategy Sile and Other Dublic Direction Schericking Strategy Sile and Other Dublic Direction Schericking Strategy Strategy
- ODNC00103_01_10_2022 Streets, Sidewalks, and Other Public Places Alterations & Maintenance
- COMM00406_04_11_2022 Pioneer League Letter re: Pickleball

END OF CONSENT AGENDA

Motion to approve the Consent Agenda as amended by Councillor Zeid, seconded by Councillor Cameron. So voted.

REGULAR AGENDA

9. MAYOR'S UPDATE

Motion to receive and file by Councillor Zeid, seconded by Councillor Cameron. So voted.

10. FIRST READING APPOINTMENTS

- APPT00361_01_09_2023 Alice Sheridan 11 Beck St. Council on Aging 2/1/2028
 APPT00362_01_09_2023 Paul E. Bushey 1Dennett Dr. Council on Aging 2/1/2028 Motion to approve collectively on 1st reading APPT00361 and APPT00362 by Councillor Zeid, seconded by
- Councillor Preston. Roll call vote. 11 yes. Motion passes.
- APPT00366_01_09_2023 Christopher Sawtelle 20 Summer St. Historical Commission 2/1/2026 Motion to refer to Planning & Development by Councillor Zeid, seconded by Councillor Cameron. So voted.

11. COMMUNICATIONS

- APPL00118_01_09_2023 29th Annual Frigid Fiver 2/12/2023 11am-1pm Motion to waive the rules, declare an emergency, and approve subject to confirming the necessary signatures were provided by Councillor Vogel, seconded by Councillor Preston. Roll call vote. 10 yes, 1 no (SZ). Motion passes.
- APPL00119_01_09_2023 2nd Hand Motor Vehicle License LCA Motors
- APPL00120_01_09_2023 2nd Hand Motor Vehicle License Plum Autoworks Motion to collectively refer APPL00119 and APPL00120 to Licenses & Permits by Councillor Zeid, seconded by Councillor Vogel. So voted.

2/1/2028

• COMM00457_01_09_2023 Ltr. Re: temporary appt. of Jamie Tuccolo as Dir. DPS Motion to receive and file by Councillor Zeid, seconded by Councillor Cameron. So voted.

12. TRANSFERS

13. SECOND READING APPOINTMENTS

• APPT0360_12_12_2022 Jeffrey Mattheson 12 Hart Rd. Electrical Inspector 2/1/2024 Motion to approve on 2nd reading by Councillor Zeid, seconded by Councillor Preston. Councillor Lane recused. Roll call vote. 10 yes, 1 recused (BL). Motion passes.

14. ORDERS

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- ORDR00404_01_09_2023 Pay Prior Year Bills
- ORDR00405_01_09_2023 FoNT Gift Acceptance
- ORDR00406_01_09_2023 SAGA Gift Acceptance
- ORDR00407_01_09_2023 Goldy Sculpture Gift Acceptance
 - ORDR00408_01_09_2023 3 Cardinals in a Tree Sculpture Gift Acceptance
 - ORDR00409_01_09_2023 Cutter West End Fire Station Loan Order
- ORDR00410_01_09_2023 Screening Cmte Fire Chief
 - Motion to refer to Public Works & Safety by Councillor Zeid, seconded by Councillor Wright. So voted.
- ORDR00411_01_09_2023 FY2023 COLA Increase
- ORDR00412_01_09_2023 COLA Base Increase Motion to collectively refer ORDR00404, ORDR00405, ORDR00406, ORDR00407, ORDR00408, ORDR00409, ORDR00411, and ORDR00412 to Budget and Finance with note that ORDR00409 will also be simultaneously referred to COTW by Councillor Zeid, seconded by Councillor Preston. So voted.

15. ORDINANCES

- ODNC00125_10_11_2022 2nd Reading Amend to Ch 5 Buildings Motion to approve on 2nd reading with correction of scrivener's error as noted by Councillor Wright sec. 5.66 paragraph 2 by Councillor Zeid, seconded by Councillor Cameron. Roll call vote. 11 yes. Motion passes.
- ODNC00133_01_09_2023 Amend to Ch 13-180 Inn Street
 Motion to refer to Public Works & Safety by Councillor McCauley, seconded by Councillor Donahue. So voted.
- ODNC00134_01_09_2023 Amend to Municipal Fees Schedule Passport Photos Motion to refer to General Government by Councillor McCauley, seconded by Councillor Preston. So voted.

Council President Shand handed out Committee assignments as follows:

Budget & Finance: Councillor Zeid (Chair), Councillor Khan, Councillor Wright Planning & Development: Councillor Cameron (Chair), Councillor Preston, Councillor Wright Public Works & Safety: Councillor Wallace (Chair), Councillor Donahue, Councillor McCauley Community Services: Councillor McCauley (Chair), Councillor Donahue, Councillor Preston Licenses & Permits: Councillor Vogel (Chair), Councillor Khan, Councillor Lane General Government: Councillor Shand (Chair), Councillor Vogel, Councillor Lane

16. COMMITTEE ITEMS

Ad Hoc Committee on Adaptive Reuse of Brown School Property In Committee:

Ad Hoc Committee on Market Landing Park and COTW

- In Committee:
- ORDR00389_11_01_2022 Naming Rights Market Landing Park

Budget & Finance

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In Committee:

- ORDR00336 03 28 2022
- ARPA Amesbury 250K (COTW) ODNC00129 11 01 2022 Defining Conflict Rule for Dept. Heads (COTW) •
 - ODNC00130 11 01 2022 Grants, Gifts, and Fees (COTW)
 - ODNC00132 11 14 2022 Mandated Reporting
- ORDR00388 11 01 2022 •
- COMM00443 11 01 2022 •
- ORDR00400 12 12 2022 •
- ORDR00401 12 12 2022 •
- Belleville Improvement Society Gift Acceptance ORDR00402 12 12 2022 • Central Congregational Church Gift Acceptance
 - ORDR00403 12 12 2022

General Government

- In Committee:
- ORDR239 02 8 2021 Council Rule 7 and 10B

License & Permits In Committee:

General Ordinance - Short Term Rental Units Rules • ODNC047 01 27 2020

Community Services (previously Neighborhood & City Services)

- In Committee:
- COMM299 02 08 2021 **Phillips Dr. Neighborhood Committee Ltr** •
 - Motion to receive and file by Councillor Wallace, seconded by Councillor Preston. So voted.
- Streets, Sidewalks, and Other Public Places Alterations & Maintenance ODNC00103 01 10 2022 • Motion to refer to Public Works & Safety by Councillor Wallace, seconded by Councillor Zeid. So voted.

NYS Facility Bond Order (COTW)

Morrill Foundation Gift Acceptance

Karen Jones Cashman Multi-Sport Court Gift Acceptance

59 Low St. FAQs (COTW)

Pioneer League Letter re: Pickleball COMM00406 04 11 2022 ٠ Motion to receive and file by Councillor Wallace, seconded by Councillor Preston. So voted.

Planning & Development

In Committee:

- COMM00445 11 14 2022 59 Low Street Plan (COTW) ٠
- COMM00455 12 12 2022 Net Zero report West End Fire Station

Public Works & Safety (previously Public Safety)

In Committee:

- COMM00412 05 31 2022 Ltr Ann Jaroncyk re: Traffic Safety •
- Ltr. Emily Dunn re: Traffic on Merrimac Street • COMM00414 05 31 2022
- ORDR00398 12 12 2022 Snow Emergency Parking Auburn St
- ORDR00399 12 12 2022 Asphalt sidewalk waiver request package - West End Fire Station project
- Letters re: Curb Cut 4 Wilkinson Dr. & 34 Hale St. COMM00456 12 12 2022 •

17. GOOD OF THE ORDER

Councillor Lane extended his congratulations Rep. Dawne Shand.

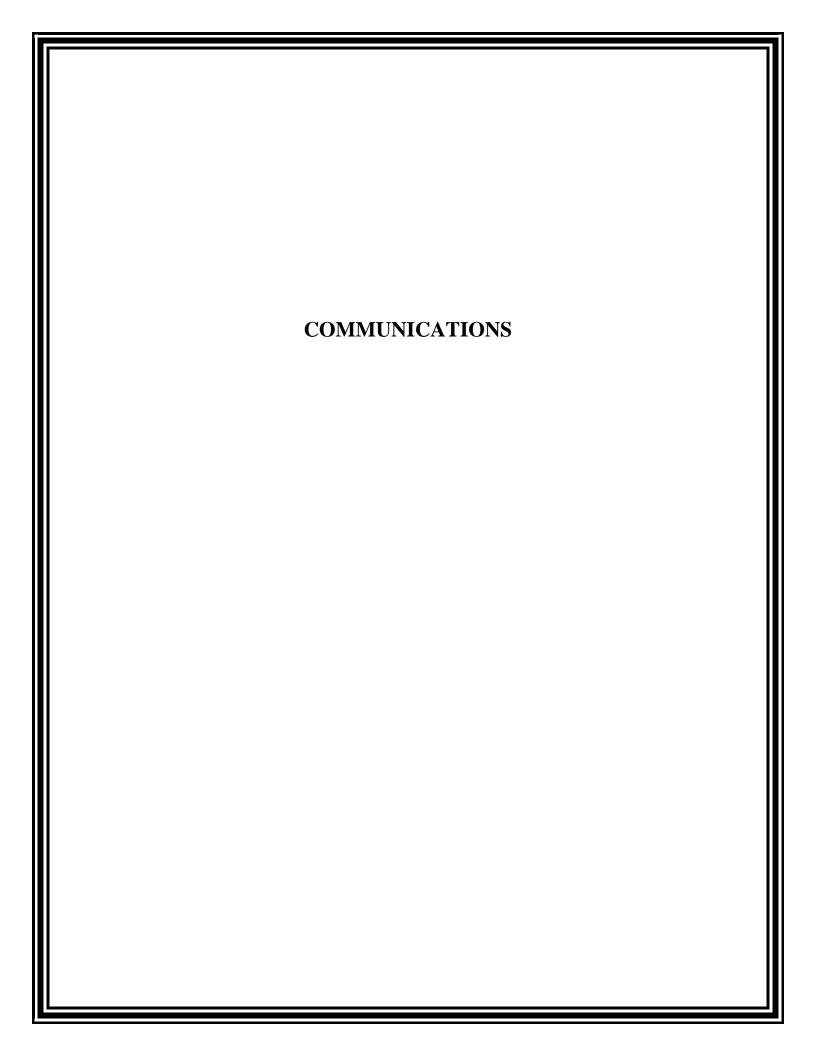
Council President Shand discussed the new City Council email accounts that were being set up, the MMA Trade Show, and the City Council Retreat that was being planned.

18. EXECUTIVE SESSION: Pursuant to MGL c. 30A s. 21 there will be an executive session for the purpose of discussing strategy with respect to potential litigation involving roadways, buildings and land use including but not limited to Doyle Drive, Newburyport, MA.

Clerk Jones read the stated purpose of the Executive Session as follows: : Pursuant to MGL c. 30A s. 21 there will be an executive session for the purpose of discussing strategy with respect to potential litigation involving roadways, buildings and land use including but not limited to Doyle Drive, Newburyport, MA.

Council President Shand declared that it would be detrimental to have these discussions in open session and stated that the City Council would not be coming out of the Executive Session to close the meeting. Roll call vote. 11 yes. Executive Session.

19. ADJOURNMENT





CITY <u>OF</u> <u>Newburyport</u> <u>Finance Department</u> <u>60 Pleasant Street</u> <u>Newburyport, MA 01950</u> <u>Phone: 978-465-4404</u> <u>www.cityofnewburyport.</u>com/finance

Sean R. Reardon Mayor		ETHAN R. MANNING FINANCE DIRECTOR/CITY AUDITOR
To:	Mayor Sean R. Reardon President and Members of the Newburyport City	
From:	Ethan R. Manning, Finance Director/City Auditor	
Date:	January 20, 2023	
Subject:	FY2023 Mid-Year Budget Report	

Attached is the FY2023 Mid-Year Budget Report that includes a summary of budget expenditures for the period of July 1, 2022 through December 31, 2022. The report covers expenditures within the General Fund and the Water, Sewer, and Harbormaster Enterprise Funds. Also included is an update on the City's revenue collections.

FY2023 Mid-Year Expenditures

Mid-year expenditures were at 49.4% of budget for the General Fund, 51.5% for the Water Enterprise Fund, 45.8% for the Sewer Enterprise Fund and 62.5% for the Harbormaster Enterprise Fund. It is typical that expenditure levels are not exactly 50% at mid-year as major expenditures occur during various times of the year depending on the department or cost center. Below is a summary of the mid-year expenditures by fund, which is broken out in greater detail in the reports that follow.

	REVISED	YTD	REMAINING	% USED
	BUDGET	EXPENDED	BUDGET	% U3ED
001 GENERAL FUND	\$80,133,622	\$39,619,807	\$40,513,815	49.4%
060 WATER ENTERPRISE FUND	\$6,196,614	\$3,189,410	\$3,007,203	51.5%
061 SEWER ENTERPRISE FUND	\$7,818,840	\$3,580,446	\$4,238,395	45.8%
6520 HARBORMASTER ENTERPRISE FUND	\$540,360	\$337,648	\$202,712	62.5%
TOTAL BUDGETARY FUNDS	\$94,689,436	\$46,727,311	\$47,962,125	49.3%

While most department/cost centers show expenses below or near 50% of appropriations, those that were higher than 60% included:

• <u>General Administration (72.4%)</u>: The largest part of this cost center are municipal insurance premiums, which are paid at the start of the fiscal year.

- <u>Human Resources (64.4%)</u>: A large component of this cost center are workers' compensation insurance premiums, which are paid at the start of the fiscal year.
- **Board of Registrar's (62.8%):** Elections work during the first half of the fiscal year was higher due to a state election.
- <u>Conservation Commission (75.0%)</u>: Funding for minute takers is drawn first from the General Fund budget and then from the revolving fund.
- **Zoning Board of Appeals (75.0%):** Funding for minute takers is drawn first from the General Fund budget and then from the revolving fund.
- <u>Emergency Management (73.6%)</u>: Higher costs have been incurred due to coverage for the Emergency Management Director (Fire Chief) who is on medical leave.
- <u>Whittier Regional Vocational Technical High School (85.0%)</u>: The majority of the assessment for the Whittier is paid during the first half of the fiscal year.
- <u>Historical Commission (100.0%)</u>: Funding for minute takers is drawn first from the General Fund budget and then from the revolving fund.
- **<u>Retirement Board (100.0%)</u>**: The City's appropriation to the Newburyport Retirement System is paid on July 1st.
- <u>Harbormaster (62.5%)</u>: Due to the seasonal nature of the department, higher costs are experienced during the first half of the fiscal year.

Additional funding may be required in some accounts, such as snow and ice, legal services and overtime, as well as, other accounts that have been impacted by recent inflationary pressures, such as chemicals and supplies. In accordance with state law, the City is allowed to exceed the budgetary appropriation for snow and ice removal as it is a matter of public safety. However, any deficit must be removed prior to year-end through the use of reserves or other available funds. If the deficit is not removed prior to year-end, then the shortage must be made-up in the next fiscal year's tax rate. In past years, Free Cash has been the primary source of funding to cover snow and ice, as well as, overtime deficits.

FY2023 Mid-Year Revenue

Mid-year revenue was at 47.9% of the FY23 estimate for the General Fund, 57.6% for the Water Enterprise Fund, 58.4% for the Sewer Enterprise Fund and 57.7% for the Harbormaster Enterprise Fund. Below is a summary of the mid-year revenue by fund, which is broken out in greater detail in the reports that follow.

	ESTIMATE	ACTUAL	REMAINING	% COLL
001 GENERAL FUND	\$77,813,345	\$37,292,285	\$40,521,060	47.9%
060 WATER ENTERPRISE FUND	\$6,196,614	\$3,566,169	\$2,630,444	57.6%
061 SEWER ENTERPRISE FUND	\$7,818,840	\$4,564,726	\$3,254,114	58.4%
6520 HARBORMASTER ENTERPRISE FUND	\$540,360	\$312,011	\$228,349	57.7%
TOTAL BUDGETARY FUNDS	\$92,369,159	\$45,735,192	\$46,633,967	49.5%

A full copy of this report is available in the Financial Reports Center, located at:

https://www.cityofnewburyport.com/financials



City of Newburyport FY2023 Mid-Year Report Overview

Expenditures:

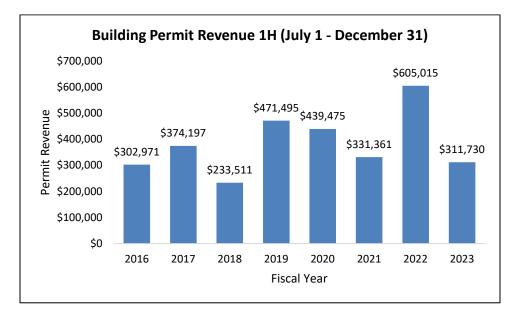
- Mid-year expenditures were at 49.4% of budget for the General Fund, 51.5% for the Water Ent. Fund, 45.8% for the Sewer Ent. Fund, 62.5% for the Harbormaster Ent. Fund.
- We anticipate the potential for operating budget transfers in the following line items by year-end:

Line Item	Potential Transfer	Reason
Fire Coverage/Overtime	\$215,000	Due to Fire Chief's medical leave & minimum staffing coverage for FF leaves
Snow & Ice	\$200,000	Variable; \$134,074 remaining as of 1/13/2023
IT Software/Licensing	\$30,000	Munis SaaS conversion, Mimecast email product, Adobe licenses, VMWare
City Solicitor	\$25,000	Variable based on activity
Water Chemicals	\$25,000	Due to higher costs
Police Building/Equip. Maint.	\$10,000	Generator failure and other unexpected needs
Emergency Mgmt. Coord.	\$10,000	Due to Fire Chief's medical leave
Ordinance Recodification	\$5,000	Variable based on activity
Parks Dog Waste Bags	\$3,000	Due to higher costs
Planning/Zoning Board	\$3,000	Increase in rate for minute takers
HR Job Advertisements	\$1,000	Due to recruitment activity
Total	\$532,000	

Revenue:

- Mid-year revenue was at 47.9% of the FY23 estimate for the General Fund, 57.6% for the Water Ent. Fund, 58.4% for the Sewer Ent. Fund and 57.7% for the Harbormaster Ent. Fund.
- Overall local receipts for the General Fund were up 2.0% compared to the first half of FY2022. Excluding motor vehicle excise, which is billed in the 2nd half of the year, 66.8% expected revenue had been collected as of 12/31/2022 and we, therefore, expect to surpass the FY2023 revenue estimate by fiscal year-end.
- Personal Property Tax collections were up 22.4% due to 2 new state directives that took effect in the 2nd half of FY2022, which changed how assessors classify second homes and the methodology for assessing utility companies.
- Meals Excise Tax collections were up 13.9% and Room Occupancy Excise Tax collections were up 10.5% due to activity, as well as, higher prices driven by inflation.

- Payments in lieu of taxes were up 28.2% due to the collection of rollback taxes collected on a Ch. 61A (agricultural) property that was sold on Low Street.
- Fee collections were up 39.0% due to an increase in tax title receipts (1H tax title revenue for the past three years: FY21 \$101,383, FY22 \$29,726, FY23 \$83,008).
- Building permits were down 48.5%; this is primarily driven by the building permit fees for a development at 3 Boston Way that were paid in October 2021 totaling \$240,000. Backing that payment out, receipts down 8.8% compared to the first six months of the prior year. For context, below is the first half building permit revenue for the past 8 fiscal years:



- Other licenses and permits were up 141.2% due to the reinstatement of fees charged by the Licensing Commission fees, which had been waived previously due to COVID; these fees generate approximately \$195,000 in annual revenue for the General Fund.
- Medicaid reimbursements were up 144.3% due to prior year reimbursement requests that were submitted by the school district earlier in the fiscal year.
- Miscellaneous recurring revenue was down due to the timing of receipts from participants in the intermunicipal agreement for Veterans Services.
- The Water Fund was up 19.4% and the Sewer Fund was up 10.3% largely driven by new development and filled vacancies in the industrial park.
- The Harbormaster Fund was down 9.3% based on slightly reduced activity from the year prior. Nonetheless, the Fund had collected 57.7% of expected revenue and is, therefore, anticipated to meet or exceed its FY2023 revenue estimate.

City of Newburyport FY2023 Mid-Year Expenditure Summary



	ORIGINAL APPROP.	TRANSFERS/ ADJUST.	REVISED BUDGET	YTD EXPENDED	REMAINING BUDGET	% USED
001 GENERAL FUND						
111 CITY COUNCIL	126,529	20	126,548	62,586	63,963	49.5%
121 MAYOR'S DEPARTMENT	440,993	0	440,993	197,419	243,574	44.8%
129 GENERAL ADMINISTRATION	367,612	0	367,612	266,194	101,418	72.4%
132 BUDGET CONTINGENCY	54,500	(52,827)	1,673	0	1,673	0.0%
135 AUDITOR'S DEPARTMENT	362,899	1,288	364,186	141,403	222,783	38.8%
141 ASSESSORS DEPARTMENT	279,957	8,291	288,248	141,201	147,046	49.0%
145 TREASURER'S DEPARTMENT	423,245	3,161	426,406	180,319	246,088	42.3%
151 INFO TECHNOLOGY DEPT	357,825	43,825	401,650	198,690	202,960	49.5%
152 HUMAN RESOURCES	331,449	0	331,449	213,439	118,010	64.4%
161 CITY CLERK'S DEPARTMENT	331,463	12,242	343,704	177,932	165,773	51.8%
163 BOARD OF REGISTRARS	72,043	0	72,043	45,243	26,801	62.8%
165 LICENSE COMMISSION	8,500	0	8,500	3,614	4,886	42.5%
171 CONSERVATION COMMISSION	1,800	0	1,800	1,350	450	75.0%
175 PLANNING BOARD	1,800	0	1,800	450	1,350	25.0%
176 ZONING BOARD	1,800	0	1,800	1,350	450	75.0%
182 PLANNING & DEVELOPMENT	498,029	9,849	507,878	253,563	254,315	49.9%
191 LEGAL DEPARTMENT	135,000	50,000	185,000	66,748	118,252	36.1%
210 POLICE DEPARTMENT	4,573,617	10,800	4,584,417	2,409,718	2,174,699	52.6%
220 FIRE DEPARTMENT	4,471,842	20,000	4,491,842	2,338,833	2,153,009	52.1%
241 BUILDING DEPARTMENT	188,108	4,245	192,354	94,665	97,688	49.2%
291 EMERGENCY MANAGEMENT	20,000	0	20,000	14,728	5,272	73.6%
292 ANIMAL CONTROL	71,088	1,988	73,076	30,244	42,832	41.4%
293 PARKING CLERK DEPARTMENT	567,450	5,240	572,690	199,412	373,278	34.8%
300 SCHOOL DEPARTMENT	35,154,240	0	35,154,240	14,426,339	20,727,901	41.0%
398 ESSEX NORTH SHORE TECH SCHOOL	120,000	0	120,000	65,371	54,629	54.5%
399 WHITTIER VO TECH SCHOOL	619,891	0	619,891	526,908	92,983	85.0%
421 PUBLIC SERVICES DEPARTMENT	3,494,100	69,726	3,563,826	1,887,613	1,676,212	53.0%
423 SNOW & ICE	313,000	0	313,000	156,503	156,497	50.0%
510 HEALTH DEPARTMENT	280,174	2,766	282,940	91,581	191,359	32.4%
519 SUSTAINABILITY	1,833,203	461	1,833,664	727,953	1,105,711	39.7%
541 COUNCIL ON AGING	382,708	1,065	383,772	149,465	234,307	38.9%
542 YOUTH SERVICES	419,946	30,000	449,946	206,753	243,193	46.0%
543 VETERANS' DEPARTMENT	286,675	19,500	306,175	128,889	177,287	42.1%
610 LIBRARY DEPARTMENT	1,468,263	0	1,468,263	691,389	776,874	47.1%
630 PARKS COMMISSION	495,968	35,000	530,968	251,508	279,459	47.4%
691 HISTORICAL COMMISSION	1,800	0	1,800	1,800	0	100.0%
710 DEBT EXCLUSION	3,167,680	0	3,167,680	1,268,490	1,899,190	40.0%
720 ORDINARY DEBT SERVICE	1,472,544	0	1,472,544	527,519	945,024	35.8%
911 RETIREMENT BOARD	5,051,416	0	5,051,416	5,050,877	539	100.0%
914 INSURANCE GROUP	10,433,654	0	10,433,654	5,266,223	5,167,431	50.5%
921 COMMISSION ON DISABILITY	0	0	0	0	0	
990 INTERFUND TRANSFERS OUT	0	1,174,172	1,174,172	1,155,525	18,647	98.4%
001 GENERAL FUND Total	78,682,810	<u>1,450,812</u>	80,133,622	39,619,807	40,513,815	<u>49.4%</u>
060 WATER ENTERPRISE FUND Total	<u>6,196,614</u>	<u>0</u>	<u>6,196,614</u>	<u>3,189,410</u>	<u>3,007,203</u>	<u>51.5%</u>
061 SEWER ENTERPRISE FUND Total	<u>7,818,840</u>	<u>0</u>	<u>7,818,840</u>	<u>3,580,446</u>	<u>4,238,395</u>	<u>45.8%</u>
6520 HARBORMASTER ENTERPRISE FUND Total	<u>520,360</u>	<u>20,000</u>	<u>540,360</u>	<u>337,648</u>	<u>202,712</u>	<u>62.5%</u>
Grand Total	<u>93,218,624</u>	<u>1,470,812</u>	<u>94,689,436</u>	<u>46,727,311</u>	<u>47,962,125</u>	<u>49.3%</u>

FY2023 Mid-Year Budget Report (July 1, 2022 - December 31, 2022)



	ORIGINAL APPROP.	TRANSFERS/ ADJUST.	REVISED BUDGET	YTD EXPENDED	REMAINING BUDGET	% USED
001 GENERAL FUND						
111 CITY COUNCIL					-	
001 PERSONNEL SERVICES	106,529	20	106,548	53,328	53,220	50.1%
002 PURCHASE OF SERVICES	20,000	0	20,000	9,257	10,743	46.3%
111 CITY COUNCIL Total	126,529	20	126,548	62,586	63,963	49.5%
121 MAYOR'S DEPARTMENT					1	
001 PERSONNEL SERVICES	326,389	0	326,389	158,123	168,266	48.4%
002 PURCHASE OF SERVICES	106,603	0	106,603	38,833	67,770	36.4%
007 OTHER CHARGES & EXPENSES	8,000	0	8,000	462	7,538	5.8%
121 MAYOR'S DEPARTMENT Total	440,993	0	440,993	197,419	243,574	44.8%
129 GENERAL ADMINISTRATION						
001 PERSONNEL SERVICES	3,500	0	3,500	0	3,500	0.0%
002 PURCHASE OF SERVICES	152,000	0	152,000	79,337	72,663	52.2%
004 SUPPLIES	6,000	0	6,000	1,060	4,941	17.7%
007 OTHER CHARGES & EXPENSES	206,112	0	206,112	185,798	20,314	90.1%
129 GENERAL ADMINISTRATION Total	367,612	0	367,612	266,194	101,418	72.4%
132 BUDGET CONTINGENCY						
007 OTHER CHARGES & EXPENSES	54,500	(52,827)	1,673	0	1,673	0.0%
132 BUDGET CONTINGENCY Total	54,500	(52,827)	1,673	0	1,673	0.0%
135 AUDITOR'S DEPARTMENT						
001 PERSONNEL SERVICES	314,194	1,288	315,481	135,605	179,877	43.0%
002 PURCHASE OF SERVICES	46,500	0	46,500	5,000	41,500	10.8%
004 SUPPLIES	1,750	0	1,750	344	1,406	19.6%
007 OTHER CHARGES & EXPENSES	455	0	455	455	0	100.0%
135 AUDITOR'S DEPARTMENT Total	362,899	1,288	364,186	141,403	222,783	38.8%
141 ASSESSORS DEPARTMENT						
001 PERSONNEL SERVICES	228,454	8,291	236,745	114,431	122,314	48.3%
002 PURCHASE OF SERVICES	47,915	0	47,915	25,125	22,790	52.4%
004 SUPPLIES	3,000	0	3,000	1,058	1,942	35.3%
007 OTHER CHARGES & EXPENSES	588	0	588	588	0	100.0%
141 ASSESSORS DEPARTMENT Total	279,957	8,291	288,248	141,201	147,046	49.0%
145 TREASURER'S DEPARTMENT						
001 PERSONNEL SERVICES	363,045	3,161	366,206	159,201	207,006	43.5%
002 PURCHASE OF SERVICES	55,750	0	55,750	18,147	37,603	32.6%
004 SUPPLIES	2,350	0	2,350	921	1,429	39.2%
007 OTHER CHARGES & EXPENSES	2,100	0	2,100	2,050	50	97.6%
145 TREASURER'S DEPARTMENT Total	423,245	3,161	426,406	180,319	246,088	42.3%
151 INFO TECHNOLOGY DEPT						
001 PERSONNEL SERVICES	115,000	43,825	158,825	34,598	124,227	21.8%
002 PURCHASE OF SERVICES	240,825	0	240,825	163,193	77,632	67.8%

FY2023 Mid-Year Budget Report (July 1, 2022 - December 31, 2022)



	ORIGINAL APPROP.	TRANSFERS/	REVISED	YTD	REMAINING BUDGET	% USED
004 SUPPLIES	2,000	ADJUST.	BUDGET 2,000	EXPENDED 899	1,101	45.0%
151 INFO TECHNOLOGY DEPT Total	357,825	43,825	401,650	198,690	202,960	49.5%
	007,010	10,010	.01,000	200,000	_0_,,,,,	1010/0
152 HUMAN RESOURCES						
001 PERSONNEL SERVICES	156,477	0	156,477	75,541	80,936	48.3%
002 PURCHASE OF SERVICES	172,873	0	172,873	137,246	35,627	79.4%
004 SUPPLIES	1,500	0	1,500	378	1,122	25.2%
007 OTHER CHARGES & EXPENSES	600	0	600	275	325	45.8%
152 HUMAN RESOURCES Total	331,449	0	331,449	213,439	118,010	64.4%
161 CITY CLERK'S DEPARTMENT						
001 PERSONNEL SERVICES	311,963	12,242	324,204	170,301	153,903	52.5%
002 PURCHASE OF SERVICES	19,500	0	19,500	7,631	11,869	39.1%
161 CITY CLERK'S DEPARTMENT Total	331,463	12,242	343,704	177,932	165,773	51.8%
163 BOARD OF REGISTRARS						
001 PERSONNEL SERVICES	4,543	0	4,543	2,219	2,324	48.8%
007 OTHER CHARGES & EXPENSES	67,500	0	67,500	43,024	24,476	63.7%
163 BOARD OF REGISTRARS Total	72,043	0	72,043	45,243	26,801	62.8%
165 LICENSE COMMISSION						
001 PERSONNEL SERVICES	7,500	0	7,500	3,325	4,175	44.3%
007 OTHER CHARGES & EXPENSES	1,000	0	1,000	289	711	28.9%
165 LICENSE COMMISSION Total	8,500	0	8,500	3,614	4,886	42.5%
171 CONSERVATION COMMISSION						
001 PERSONNEL SERVICES	1,800	0	1,800	1,350	450	75.0%
171 CONSERVATION COMMISSION Total	1,800	0	1,800	1,350	450	75.0%
175 PLANNING BOARD						
001 PERSONNEL SERVICES	1,800	0	1,800	450	1,350	25.0%
175 PLANNING BOARD Total	1,800	0	1,800	450	1,350	25.0%
176 ZONING BOARD						
001 PERSONNEL SERVICES	1,800	0	1,800	1,350	450	75.0%
176 ZONING BOARD Total	1,800	0	1,800	1,350	450	75.0%
182 PLANNING & DEVELOPMENT						
001 PERSONNEL SERVICES	438,979	9,849	448,828	215,914	232,914	48.1%
002 PURCHASE OF SERVICES	56,000	0	56,000	36,087	19,913	64.4%
004 SUPPLIES	3,050	0	3,050	1,562	1,488	51.2%
182 PLANNING & DEVELOPMENT Total	498,029	9,849	507,878	253,563	254,315	49.9%
191 LEGAL DEPARTMENT						
002 PURCHASE OF SERVICES	135,000	50,000	185,000	66,748	118,252	36.1%
191 LEGAL DEPARTMENT Total	135,000	50,000	185,000	66,748	118,252	36.1%



	ORIGINAL APPROP.	TRANSFERS/ ADJUST.	REVISED BUDGET	YTD EXPENDED	REMAINING BUDGET	% USED
210 POLICE DEPARTMENT						
001 PERSONNEL SERVICES	4,227,655	0	4,227,655	2,229,301	1,998,354	52.7%
002 PURCHASE OF SERVICES	172,247	10,800	183,047	107,163	75,884	58.5%
004 SUPPLIES	72,100	0	72,100	16,564	55,536	23.0%
007 OTHER CHARGES & EXPENSES	21,890	0	21,890	19,773	2,117	90.3%
008 CAPITAL OUTLAY	79,725	0	79,725	36,917	42,808	46.3%
210 POLICE DEPARTMENT Total	4,573,617	10,800	4,584,417	2,409,718	2,174,699	52.6%
220 FIRE DEPARTMENT						
001 PERSONNEL SERVICES	4,179,792	20,000	4,199,792	2,192,452	2,007,340	52.2%
002 PURCHASE OF SERVICES	226,000	0	226,000	114,269	111,731	50.6%
004 SUPPLIES	60,500	0	60,500	28,482	32,018	47.1%
007 OTHER CHARGES & EXPENSES	5,550	0	5,550	3,630	1,920	65.4%
220 FIRE DEPARTMENT Total	4,471,842	20,000	4,491,842	2,338,833	2,153,009	52.1%
241 BUILDING DEPARTMENT						
001 PERSONNEL SERVICES	186,108	4,245	190,354	93,316	97,037	49.0%
004 SUPPLIES	2,000	0	2,000	1,349	651	67.5%
241 BUILDING DEPARTMENT Total	188,108	4,245	192,354	94,665	97,688	49.2%
291 EMERGENCY MANAGEMENT						
001 PERSONNEL SERVICES	18,000	0	18,000	13,338	4,662	74.1%
004 SUPPLIES	500	0	500	425	75	85.0%
007 OTHER CHARGES & EXPENSES	1,500	0	1,500	965	535	64.3%
291 EMERGENCY MANAGEMENT Total	20,000	0	20,000	14,728	5,272	73.6%
292 ANIMAL CONTROL						
001 PERSONNEL SERVICES	63,688	1,988	65,676	28,633	37,043	43.6%
002 PURCHASE OF SERVICES	4,950	0	4,950	1,054	3,896	21.3%
004 SUPPLIES	2,100	0	2,100	557	1,543	26.5%
007 OTHER CHARGES & EXPENSES	350	0	350	0	350	0.0%
292 ANIMAL CONTROL Total	71,088	1,988	73,076	30,244	42,832	41.4%
293 PARKING CLERK DEPARTMENT						
001 PERSONNEL SERVICES	263,175	5,240	268,415	103,597	164,818	38.6%
002 PURCHASE OF SERVICES	253,250	0	253,250	83,748	169,502	33.1%
004 SUPPLIES	51,025	0	51,025	12,067	38,958	23.6%
293 PARKING CLERK DEPARTMENT Total	567,450	5,240	572,690	199,412	373,278	34.8%
300 SCHOOL DEPARTMENT						
002 PURCHASE OF SERVICES	35,154,240	0	35,154,240	14,426,339	20,727,901	41.0%
300 SCHOOL DEPARTMENT Total	35,154,240	0	35,154,240	14,426,339	20,727,901	41.0%
398 ESSEX NORTH SHORE TECH SCHOOL						
002 PURCHASE OF SERVICES	120,000	0	120,000	65,371	54,629	54.5%
398 ESSEX NORTH SHORE TECH SCHOOL Total	120,000	0	120,000	65,371	54,629	54.5%



	ORIGINAL APPROP.	TRANSFERS/ ADJUST.	REVISED BUDGET	YTD EXPENDED	REMAINING BUDGET	% USED
399 WHITTIER VO TECH SCHOOL						
002 PURCHASE OF SERVICES	619,891	0	619,891	526,908	92,983	85.0%
399 WHITTIER VO TECH SCHOOL Total	619,891	0	619,891	526,908	92,983	85.0%
421 PUBLIC SERVICES DEPARTMENT						
001 PERSONNEL SERVICES	2,255,000	7,451	2,262,451	1,077,782	1,184,669	47.6%
002 PURCHASE OF SERVICES	542,600	0	542,600	247,532	295,068	45.6%
004 SUPPLIES	269,000	0	269,000	168,744	100,256	62.7%
008 CAPITAL OUTLAY	427,500	62,275	489,775	393,556	96,219	80.4%
421 PUBLIC SERVICES DEPARTMENT Total	3,494,100	69,726	3,563,826	1,887,613	1,676,212	53.0%
423 SNOW & ICE						
001 PERSONNEL SERVICES	120,000	0	120,000	2,598	117,402	2.2%
002 PURCHASE OF SERVICES	193,000	0	193,000	153,905	39,095	79.7%
423 SNOW & ICE Total	313,000	0	313,000	156,503	156,497	50.0%
510 HEALTH DEPARTMENT						
001 PERSONNEL SERVICES	233,108	2,766	235,874	81,917	153,958	34.7%
002 PURCHASE OF SERVICES	41,566	0	41,566	8,018	33,548	19.3%
004 SUPPLIES	4,500	0	4,500	1,166	3,334	25.9%
007 OTHER CHARGES & EXPENSES	1,000	0	1,000	481	519	48.1%
510 HEALTH DEPARTMENT Total	280,174	2,766	282,940	91,581	191,359	32.4%
519 SUSTAINABILITY						
001 PERSONNEL SERVICES	130,703	461	131,164	65,818	65,346	50.2%
002 PURCHASE OF SERVICES	1,700,750	0	1,700,750	661,366	1,039,384	38.9%
004 SUPPLIES	1,750	0	1,750	769	981	43.9%
519 SUSTAINABILITY Total	1,833,203	461	1,833,664	727,953	1,105,711	39.7%
541 COUNCIL ON AGING						
001 PERSONNEL SERVICES	345,458	1,065	346,522	146,845	199,678	42.4%
002 PURCHASE OF SERVICES	26,000	0	26,000	(467)	26,467	-1.8%
004 SUPPLIES	11,250	0	11,250	3,088	8,162	27.4%
541 COUNCIL ON AGING Total	382,708	1,065	383,772	149,465	234,307	38.9%
542 YOUTH SERVICES						
001 PERSONNEL SERVICES	380,646	0	380,646	183,067	197,579	48.1%
002 PURCHASE OF SERVICES	23,800	30,000	53,800	19,536	34,264	36.3%
007 OTHER CHARGES & EXPENSES	15,500	0	15,500	4,150	11,350	26.8%
542 YOUTH SERVICES Total	419,946	30,000	449,946	206,753	243,193	46.0%
543 VETERANS' DEPARTMENT						
001 PERSONNEL SERVICES	150,347	19,500	169,847	73,094	96,754	43.0%
002 PURCHASE OF SERVICES	7,268	0	7,268	2,514	4,754	34.6%
007 OTHER CHARGES & EXPENSES	129,060	0	129,060	53,281	75,779	41.3%
543 VETERANS' DEPARTMENT Total	286,675	19,500	306,175	128,889	177,287	42.1%



	ORIGINAL	TRANSFERS/	REVISED	YTD	REMAINING	% USED
610 LIBRARY DEPARTMENT	APPROP.	ADJUST.	BUDGET	EXPENDED	BUDGET	
001 PERSONNEL SERVICES	1,090,809	0	1,090,809	464,291	626,518	42.6%
002 PURCHASE OF SERVICES	377,454	0	377,454	227,098	150,356	60.2%
610 LIBRARY DEPARTMENT Total	1,468,263	0	1,468,263	691,389	776,874	47.1%
630 PARKS COMMISSION						
001 PERSONNEL SERVICES	368,418	0	368,418	153,765	214,652	41.7%
002 PURCHASE OF SERVICES	48,800	0	48,800	22,785	26,015	46.7%
004 SUPPLIES	66,150	35,000	101,150	73,231	27,919	72.4%
007 OTHER CHARGES & EXPENSES	600	0	600	600	0	100.0%
008 CAPITAL OUTLAY	12,000	0	12,000	1,127	10,873	9.4%
630 PARKS COMMISSION Total	495,968	35,000	530,968	251,508	279,459	47.4%
691 HISTORICAL COMMISSION						
001 PERSONNEL SERVICES	1,800	0	1,800	1,800	0	100.0%
691 HISTORICAL COMMISSION Total	1,800	0	1,800	1,800	0	100.0%
710 DEBT EXCLUSION						
009 DEBT SERVICE	3,167,680	0	3,167,680	1,268,490	1,899,190	40.0%
710 DEBT EXCLUSION Total	3,167,680	0	3,167,680	1,268,490	1,899,190	40.0%
720 ORDINARY DEBT SERVICE						
009 DEBT SERVICE	1,472,544	0	1,472,544	527,519	945,024	35.8%
720 ORDINARY DEBT SERVICE Total	1,472,544	0	1,472,544	527,519	945,024	35.8%
911 RETIREMENT BOARD						
001 PERSONNEL SERVICES	5,051,416	0	5,051,416	5,050,877	539	100.0%
911 RETIREMENT BOARD Total	5,051,416	0	5,051,416	5,050,877	539	100.0%
914 INSURANCE GROUP						
001 PERSONNEL SERVICES	10,433,654	0	10,433,654	5,266,223	5,167,431	50.5%
914 INSURANCE GROUP Total	10,433,654	0	10,433,654	5,266,223	5,167,431	50.5%
921 COMMISSION ON DISABILITY Total	0	0	0	0	0	
990 INTERFUND TRANSFERS OUT						
010 OTHER FINANCING USES	0	1,174,172	1,174,172	1,155,525	18,647	98.4%
990 INTERFUND TRANSFERS OUT Total	0	1,174,172	1,174,172	1,155,525	18,647	98.4%
001 GENERAL FUND Total	78,682,810	<u>1,450,812</u>	<u>80,133,622</u>	<u>39,619,807</u>	<u>40,513,815</u>	<u>49.4%</u>
060 WATER ENTERPRISE FUND						
450 WATER DEPARTMENT						
001 PERSONNEL SERVICES	2,446,395	10,000	2,456,395	1,311,992	1,144,403	53.4%
002 PURCHASE OF SERVICES	1,257,279	0	1,257,279	541,182	716,097	43.0%
004 SUPPLIES	211,214	0	211,214	146,787	64,427	69.5%
007 OTHER CHARGES & EXPENSES	119,044	(10,000)	109,044	102,889	6,155	94.4%
008 CAPITAL OUTLAY	382,000	0	382,000	53,846	328,154	14.1%

FY2023 Mid-Year Budget Report (July 1, 2022 - December 31, 2022)



	ORIGINAL	TRANSFERS/	REVISED	YTD	REMAINING	% USED
	APPROP.	ADJUST.	BUDGET	EXPENDED	BUDGET	FR 00/
009 DEBT SERVICE	1,780,682	0	1,780,682	1,032,715	747,967	58.0%
450 WATER DEPARTMENT Total	6,196,614	0	6,196,614	3,189,410	3,007,203	51.5%
060 WATER ENTERPRISE FUND Total	<u>6,196,614</u>	<u>0</u>	<u>6,196,614</u>	<u>3,189,410</u>	<u>3,007,203</u>	<u>51.5%</u>
061 SEWER ENTERPRISE FUND						
440 SEWER DEPARTMENT						
001 PERSONNEL SERVICES	2,587,010	10,000	2,597,010	1,359,082	1,237,928	52.3%
002 PURCHASE OF SERVICES	1,412,070	0	1,412,070	583,864	828,206	41.3%
004 SUPPLIES	489,500	0	489,500	271,552	217,948	55.5%
007 OTHER CHARGES & EXPENSES	115,684	(10,000)	105,684	88,241	17,443	83.5%
008 CAPITAL OUTLAY	287,000	0	287,000	50,208	236,792	17.5%
009 DEBT SERVICE	2,927,576	0	2,927,576	1,227,498	1,700,078	41.9%
440 SEWER DEPARTMENT Total	7,818,840	0	7,818,840	3,580,446	4,238,395	45.8%
061 SEWER ENTERPRISE FUND Total	<u>7,818,840</u>	<u>0</u>	<u>7,818,840</u>	<u>3,580,446</u>	<u>4,238,395</u>	<u>45.8%</u>
6520 HARBORMASTER ENTERPRISE FUND						
295 HARBORMASTER DEPARTMENT						
001 PERSONNEL SERVICES	319,313	0	319,313	207,756	111,557	65.1%
002 PURCHASE OF SERVICES	57,250	0	57,250	12,453	44,797	21.8%
004 SUPPLIES	17,400	0	17,400	13,243	4,157	76.1%
007 OTHER CHARGES & EXPENSES	19,500	0	19,500	17,708	1,793	90.8%
008 CAPITAL OUTLAY	30,000	0	30,000	5,291	24,709	17.6%
009 DEBT SERVICE	76,898	0	76,898	61,199	15,699	79.6%
010 OTHER FINANCING USES	0	20,000	20,000	20,000	0	100.0%
295 HARBORMASTER DEPARTMENT Total	520,360	20,000	540,360	337,648	202,712	62.5%
6520 HARBORMASTER ENTERPRISE FUND Total	<u>520,360</u>	<u>20,000</u>	<u>540,360</u>	<u>337,648</u>	<u>202,712</u>	<u>62.5%</u>
Grand Total	<u>93,218,624</u>	<u>1,470,812</u>	<u>94,689,436</u>	<u>46,727,311</u>	<u>47,962,125</u>	<u>49.3%</u>



City of Newburyport FY2023 Mid-Year Revenue Summary

		<u> </u>	FY2022 Mid-Ye	ear Revenue		<u> </u>	FY2023 Mid-Ye	ear Revenue		<u>FY22 vs. FY</u>	23 + <u>/-</u>	
CATEGORY		ESTIMATE	6MO ACTUAL	REMAINING	% COLL	ESTIMATE	6MO ACTUAL	REMAINING	% COLL	\$	%	
Tax Revenue												
Real Estate Tax		62,389,727	30,317,319	32,072,407	48.6%	65,647,367	31,447,383	34,199,984	47.9%	1,130,063	3.7%	1
Personal Property Tax		818,870	326,717	492,153	39.9%	737,943	400,015	337,928	54.2%	73,298	22.4%	1
Total Tax Revenue		<u>63,208,597</u>	<u>30,644,036</u>	<u>32,564,560</u>	<u>48.5%</u>	<u>66,385,310</u>	<u>31,847,398</u>	<u>34,537,912</u>	48.0%	<u>1,203,361</u>	<u>3.9%</u>	1
Local Receipts												
Motor Vehicle Excise	(1)	2,800,000	469,806	2,330,194	16.8%	2,850,000	467,591	2,382,409	16.4%	(2,216)	-0.5%	\mathbf{V}
Other Excise	-											
a.Meals Excise	Г	600,000	439,879	160,121	73.3%	662,750	500,938	161,812	75.6%	61,059	13.9%	\uparrow
b.Room Occupancy Excise	ſ	260,000	265,995	(5 <i>,</i> 995)	102.3%	371,000	294,015	76,985	79.2%	28,019	10.5%	$\mathbf{\uparrow}$
Pen & Int on Tax & Exc	Г	325,000	148,067	176,933	45.6%	300,000	160,924	139,076	53.6%	12,857	8.7%	1
Payments in Lieu of Taxes	(2)	27,000	20,144	6,856	74.6%	27,000	25,818	1,182	95.6%	5,674	28.2%	1
Fees	(3)	298,000	132,127	165,873	44.3%	245,000	183,621	61,379	74.9%	51,494	39.0%	1
Other Dept. Revenue	(4)	60,000	36,620	23,381	61.0%	70,000	38,353	31,647	54.8%	1,734	4.7%	1
Licenses and Permits												
a.Building Permits		661,300	605,015	153,370	182.2%	700,000	311,730	388,270	44.5%	(293,285)	-48.5%	1
b.Other Licenses & Permits		200,000	102,916	153,371	282.2%	251,000	248,195	2,805	98.9%	145,279	141.2%	\uparrow
Fines & Forfeits		5,000	3,678	1,323	73.6%	7,500	2,395	5,105	31.9%	(1,283)	-34.9%	\mathbf{V}
Investment Income		60,000	26,289	33,711	43.8%	45,000	105,435	(60,435)	234.3%	79,147	301.1%	\uparrow
Medicaid Reimbursement		110,000	20,586	89,414	18.7%	110,000	50,286	59,714	45.7%	29,700	144.3%	↑
Miscellaneous Recurring	(5)	170,700	83,228	87,472	48.8%	200,000	36,007	163,993	18.0%	(47,220)	-56.7%	\mathbf{V}
Miscellaneous Non-Recurring		0	61,065	(61,065)	100.0%	0	38,550	(38,550)	100.0%	(22,514)	-36.9%	\mathbf{V}
Total Local Receipts		<u>5,577,000</u>	<u>2,415,414</u>	<u>3,161,586</u>	<u>43.3%</u>	<u>5,839,250</u>	<u>2,463,858</u>	<u>3,375,392</u>	<u>42.2%</u>	<u>48,444</u>	<u>2.0%</u>	↑
Local Receipts Excluding MV Excis	е	2,777,000	1,945,608	831,392	70.1%	2,989,250	1,996,268	992,982	66.8%	50,660	2.6%	↑
Net State Aid		<u>4,909,318</u>	<u>2,559,927</u>	<u>2,349,391</u>	<u>52.1%</u>	<u>5,588,785</u>	<u>2,981,029</u>	<u>2,607,756</u>	<u>53.3%</u>	<u>421,102</u>	<u>16.4%</u>	↑
Total General Fund Revenue		73,694,915	35,619,378	38,075,537	<u>48.3</u> %	77,813,345	37,292,285	40,521,060	<u>47.9</u> %	1,672,907	<u>4.7</u> %	↑
Enterprise Funds												
Water Fund Revenue		<u>5,677,519</u>	<u>2,985,912</u>	<u>2,691,607</u>	<u>52.6%</u>	<u>6,196,614</u>	<u>3,566,169</u>	2,630,444	<u>57.6%</u>	<u>580,257</u>	<u>19.4%</u>	$\mathbf{\uparrow}$
Sewer Fund Revenue		7,575,758	4,139,441	3,436,317	54.6%	7,818,840	4,564,726	3,254,114	58.4%	425,285	10.3%	↑
Harbormaster Fund Revenue		522,232	343,932	178,301	65.9%	540,360	312,011	228,349	57.7%	(31,920)	-9.3%	
		<u> </u>				<u> </u>						
Total Budgetary Funds		87,470,424	43,088,662	44,381,762	<u>49.3</u> %	92,369,159	45,735,192	46,633,967	<u>49.5</u> %	2,646,530	<u>6.1</u> %	↑

(1) Motor vehicle excise tax bills mailed out by end of Feburary.

(2) Payments in lieu of taxes paid in March; category includes any roll back taxes as well.

(3) Municipal liens, off duty fees, registry fees, tax title, fire alarm box fees.

(4) Copies/recordings, zoning/ordinances, business certificates.

(5) Police incident/accident, cell tower lease payments, Animal Control, Veterans' Services, US Fish & Wildlife refuge revenue sharing.

FY2023 Mid-Year Budget Report (July 1, 2022 - December 31, 2022)

COMM00459_01_30_2023

January 16, 2023

Christine Wallace Ward 4 Councillor Newburyport City Council 60 Pleasant Street Newburyport MA 01950

Dear Councillor Wallace,

We, the undersigned, live on Arlington Street, within Newburyport's Ward 4. Our block runs between High Street and Highland Avenue, and we experience considerable traffic at times, largely due to our proximity to Anna Jacques Hospital. We, of course, applaud the work of the hospital and its staff, and we also recognize that vehicular traffic is a part of life for many in Newburyport. However, speeding on Arlington Street is a real and significant problem, and we strongly feel that something must be done to mitigate it.

All too many drivers who choose to drive on Arlington Street choose to ignore that they are traveling through a residential block. Cars race to and from the Highland Avenue access to the hospital. Construction and delivery trucks speed up and down the street, shaking our homes. Multiple times a day, drivers pass through at unsafe speeds, hustling to get to wherever they are going, oblivious—or indifferent—to the effect on those who call Arlington Street home.

The situation negatively affects our quality of life and poses undeniable risks. On Arlington Street, our homes sit close to the street, fronted by sidewalks that run directly alongside the curb. The speeding results in a perilous situation for all the block's residents, particularly the many Arlington Street families with young children.

In our view, it is imperative that we, as a community, prioritize on the peace of mind and safety of residents. We urge you and your colleagues on the City Council to consider means of effectively addressing the speeding on Arlington Street, and we would welcome participation in the discussion. Thank you very much.

Stephen Hochbrunn, Mary Jo Palermo 5 Arlington Street

Laura Kernan, Jean-Francois Fullum 4 Arlington Street, Unit B

Caroline Holland 6 Arlington Street, Unit B

Michelle Jewett 8 Arlington Street Susan Stone & Jaimie Stone Currier 3 Arlington Street

Frank Collazo 6 Arlington Street, Unit A

Peter Fitzsimmons 7 Arlington Street

John and Heather Hansen 10 Arlington Street Nan Ma 11 Arlington Street

Meghann and Patrick Boyle 13 Arlington Street

Madeline Nash and Robert Glenn Casey 19 Arlington Street

Sarah and Alex Guckenburg 27 Arlington Street Christine and Anthony Salvatore 12 Arlington Street

Danielle and Konstantin Danilov 14 Arlington Street

Ulrika Gerth 24 Arlington Street January 24, 2023

Re The Newburyport Park Reorganization Plan

Dear President Shand and City Council Members,

We write as the Board Members of the newly formed non-profit organization Port Parks Alliance ("PPA") referenced in the Mayor's Park Reorganization Plan dated January 24, 2023.

We came together over the past few months with the intention of creating a non-profit that could support Newburyport's parks in a similar fashion to that of other local "friends" organizations such as the Newburyport Education Foundation. The specific need for fundraising crystallized as it became increasingly apparent that the Parks Conservancy would cease to exist.

The mission of the PPA is to collaborate with the City of Newburyport and its stakeholders to support the care, preservation, and enhancement of Newburyport parks. More specifically, we plan to bolster the missions of the Newburyport Parks Department and Parks Commission, as set out in the 10-year Strategic Plan adopted on January 23, 2023, through:

- Independent capital improvement fundraising;
- organizing of volunteers; and
- education and advocacy.

The PPA will operate with full transparency with respect to acceptance and allocation of donations, including submitting all donations in excess of \$500 to the City Council for acceptance. The PPA has its own tax identification number and will not have any formal relationship with the Morrill Foundation. We are in the process of completing incorporation and 501(c)(3) filings. The PPA Treasurer, Jim McCarthy, is in discussion with the City's Parks Manager and Finance Director to collaborate on processes for accounting and tracking of all donations from receipt through communicating gratitude and outcomes back to donors.

We have held a handful of informal meetings to date with a number of Newburyport residents interested in supporting the city's park. We anticipate establishing formal meetings and group membership in the coming months once our formation paperwork is finalized, as well as launching a website and beginning fundraising and volunteerism activities.

With this context and background, we each reviewed the current version of the Mayor's Newburyport Parks Reorganization Plan, in particular references to the PPA. We believe the Reorganization Plan sets out responsibilities and activities for the PPA that align with the organization's mission and that the PPA would be well-suited to carry out. We stand ready to work with the Parks Commission, Mayor's office, and City staff as outlined in the Reorganization Plan should the Plan be approved by the City Council.

Sincerely,

Andrea Eigerman, President

Jim McCarthy, Treasurer

Stacey Macmillan, Secretary



City of Newburyport Department of Public Services

January 24, 2023

To President Shand and Respected Members of the Newburyport City Council:

I, Jamie Tuccolo, Acting Director for the Department of Public Services, am writing to you in support of the Parks Department Reorganizational Plan. Under this plan the Parks Department will become a division within DPS thus allowing both departments to utilize equipment as well as personnel, materials etc.

This merger will lead to a more efficient work schedule to address not only issues that may arise but maintenance of all City owned properties under each department.

If you have any questions, please feel free to contact me.

Respectfully, Japaie Tucco

Acting Director, Department of Public Services



CITY OF NEWBURYPORT OFFICE OF PLANNING AND DEVELOPMENT 60 PLEASANT STREET • P.O. BOX 550 NEWBURYPORT, MA 01950 (978) 465-4400

MEMORANDUM

TO:Honorable Members of the Newburyport City CouncilFROM:Andrew R. Port, Director of Planning & DevelopmentCC:Sean R. Reardon, Mayor
Andrew Levine, Chief of Staff
Kim Turner, Special Projects ManagerRE:Proposed Parks Reorganization PlanDATE:January 24, 2023

I am in receipt of the proposed Parks Reorganization Plan presented to the Parks Commission on 1/23/2023, which I understand is to be submitted to the Council on 1/30/23 for referral to Committee and subsequent review. I have discussed aspects of this plan, and the capacity and needs of this department overall, with the Mayor and his Administration during the past few months. As Director, I can verify that there is adequate "bandwidth" in the Staff Planner position within this Department to assist the Commission in the manner presented within the proposed plan and presentation.

It is my understanding that various other activities associated with the Parks Department/Division will be handled by others (e.g. operations, routine inspections and maintenance, procurement, contract management, budget assistance, work orders, meeting agendas and minutes, and pro forma permits and reservations). I also anticipate that large capital projects (e.g. Market Landing Park, Bartlett Mall, etc.) will continue to be overseen by existing staff (e.g. Planning Director, Manager of Special Projects, Senior Project Manager), and that larger or more complicated grant applications would be overseen, or assisted, by the City's Grants Manager and/or Special Projects Manager. These areas are indeed better suited to existing/alternative staff positions focused on these particular areas, and with the relevant expertise (e.g. bidding, construction management, etc.).

There is a beneficial relationship between long-term planning efforts undertaken by this Department (*in conjunction with others*) and the type of coordination and assistance our staff planner can provide to the Parks Commission here. For example, we have routinely overseen periodic updates to the City's Master Plan and Open Space & Recreation Plan (OSRP) along with other long-range planning documents (*several of which are required for access to state and federal funding programs*). Assistance with monitoring, implementation and update of the Commission's 10-Year Strategic Plan would be consistent with existing planning and project management work in this Department and the Staff Planner's job description, as would the correlation with managing and tracking related yearly CIP requests. On a parallel track, the Staff Planner already assists the Community Preservation Committee (CPC) in its yearly review of grant applications and funding recommendations to the Council, many of

which involve improvements to the City's park facilities. Improved coordination would likely result from integration of these continually evolving project listings and priorities, associated funding timelines, etc.

Please feel free to reach out should you have any questions regarding the potential role of this Department in any Parks Reorganization Plan ultimately implemented, and/or other planning work managed by Department staff.

City of Newburyport

Parks Department

60 Pleasant Street

Newburyport, MA 01950

January 13, 2023

Newburyport City Council

60 Pleasant Street

Newburyport MA 01950

Dear Councilors:

I am writing this letter in support of the Parks Department transition plan placing the Parks Department under the Department of Public Services.

In the planning process of creating this plan it became more and more evident to me that this is the proper place for a municipal Parks Department within City Government. The process involved at the beginning with Paradigm Consulting showed me that the proper place for our department is within the DPS. The ability for the Parks Department to utilize not only the administrative staff of DPS and the labor force, but also the use of aligned equipment and supplies, showed me the need for this transition.

The synergy that will come with this transition plan will propel the Parks Department from a small entity to one that can take on larger capital projects within the parks, higher quality work as well as a collaboration of likeminded individuals that have a common goal in mind, to serve the residents of the City of Newburyport.

I continue to strive to make people aware of the need for maintenance in the city's parks. With the funding of the Bartlet Mall Renovation and the soon to be Market Landing Park there has been a substantial investment in the City's Park system. With the changing demographics of the City and a higher level of expectations for quality there is a great need for maintenance. This transition will be a catalyst to improve this need within the Park system.

Sincerely,

Michael P Hennessey

Parks Manager, City of Newburyport

24 January 2023

Newburyport City Council City Hall 60 Pleasant Street Newburyport, MA 01950

Re: Parks Reorganization Plan

To President Heather Shand and Members of the City Council:

On January 23, the Parks Commission voted to support Mayor Reardon's Parks Reorganization Plan. This vote reflects the opinion of the Parks Commission that the plan ensures for the effective protection, management, and maintenance of Newburyport's parks now and for generations to come.

Over the past several months, the Parks Commission has held a series of Special Meetings to develop a 10-Year Strategic Vision for Newburyport's Parks. This vision is designed to work in tandem with the Parks Reorganization Plan. Where the Reorganization Plan details an efficient organizational structure for the support and management of our parks, our Strategic Vision provides a clear direction for what we hope our parks can be now and in the future. Central to this vision is a set of six Core Values that reflects the Parks Commission's priorities and guides our decision-making. These Core Values are:

- 1. Environmental Conservation
- 2. Health & Wellness
- 3. Diversity, Equity & Inclusion
- 4. Community Engagement & Communication
- 5. Economic Vitality, Planning & Stability
- 6. Historic Preservation

The newly proposed organizational structure will relieve the Parks Commission of some of its more mundane tasks (permitting, reservations, fees), and allow us to focus on more visionary projects and initiatives (adult parks programming, climate resiliency, universal accessibility, historic preservation). It is our belief that Parks Reorganization, combined with our 10-Year Strategic Vision and Core Values, will serve to provide the best possible parks experience for our diverse community of park users.

Sincerely,

Ted Boretti Chair, Newburyport Parks Commission



January 25, 2023

Dear Council President Shand and City Council Members,

I am writing to show our support for Mayor Reardon's Parks Reorganization Plan. The Youth Services Department is prepared to take on the adult recreation programming that was running through the Parks Department previously.

These programs will fall under our Rec & Enrichment Division. Associate Director, Joe Pauline, has a history of programming for all ages. He looks forward to rebuilding the programing that has been offered in the past as well as begin to look forward to new partnerships. We have the necessary platform of our registration system to make this a seamless transition and believe we can easily work with outside vendors to continue programming. Our goal will be to work with the Parks Commission to expand programming over the next few years to create healthy opportunities to all of our City's residents. We are committed, like our youth programs, to making all programs accessible and inclusive to all and to reflect the diversity of our community.

Please let me know if I can provide any more information.

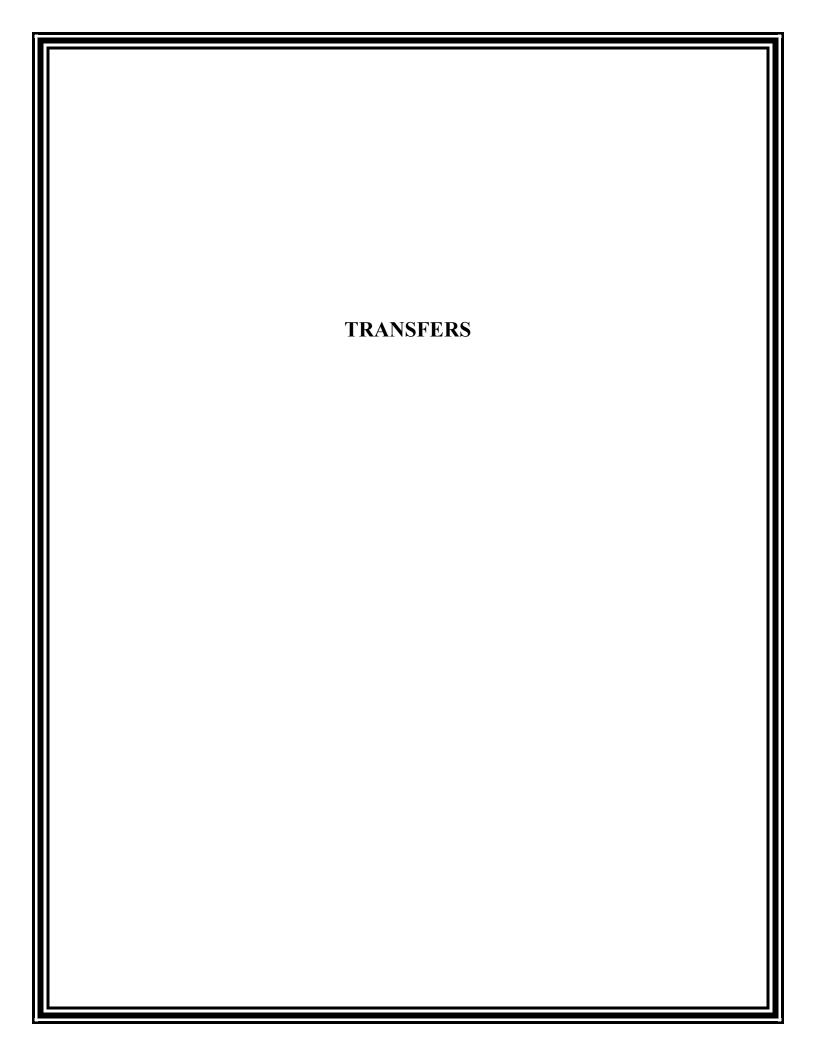
Thank you!

Andrea Egnont

Andrea Egmont Director of Youth and Recreation Services City of Newburyport 978-465-4434 ext 1351 Pronouns: She, Her, Hers

www.newburyportyouthservices.com

Newburyport Youth Service 60 Pleasant St. Newburyport, MA 01950 978.465.4434 <u>youthservices@cityofnewburyport.com</u> www.newburyportyouthservices.com





CITY OF NEWBURYPORT FY 2023

RECEIVED CITY CLERK'S OFFICE NEWBURYPORT, MA

TRANSFER/APPROPRIATION REQUEST 24 P 12: 47

Department:	Fire Department		
Submitted by:	Stephen Bradbury, Jr., Acting Chief	Date Submitted:	1/30/2023
Transfer From:			
Account Name:	General Fund - Free Cash	Balance:	\$ 2,425,547.00
Account Number:	01-35910	Category:	n/a
Amount:	\$164,891.00	Trans I/O:	\$ (1,891,090.00)
Why Funds Are Ava	ailable:		
	Department of Revenue certified Free Cash f gal expenditure with the approval of the May		
Account Name:	Salary Fire Chief	Balance:	\$ 11,472.08
Account Number:	01220001-51101	Category:	\$ 1,691,394.30
Amount:	\$80,845.00	Trans I/O:	\$ -
Why Funds Are Nee	-hahe		

Why Funds Are Needed:

To pay the salary for the Acting Fire Chief, while the Fire Chief is on paid medical leave. Actual expenses will depend on the duration of the leave.

Transfer To:

Account Name:	Firefighter Overtime	Balance:	\$ 141,451.52
Account Number:	01220001-51301	Category:	\$ 1,691,394.30
Amount:	\$75,000.00	Trans I/O:	 -
Why Funds Are Needed			

Departmental leaves, including sick and vacation time, continue to put pressure on the overtime budget for the Fire Department. It is recommended that \$75,000 is transferred into the overtime account at this time, with the expectation that another transfer may be needed by year-end.

Transfer To:

Account Name:	Emergency Management Director	Balance:	\$	185.08
Account Number:	01291001-51101	Category:	\$	2,354.48
Amount:	\$9,046.00	Trans I/O:	\$	
Why Funds Are Needed:			<u> </u>	

To pay the salary for the Acting Emergency Management Director (Acting Fire Chief), while the Emergency Management Director (Fire Chief) is on paid medical leave. Actual expenses will depend on the duration of the leave.

Sean R. Reardon, Mayor:

Ethan R. Manning, Auditor:

City Council Action:

liant

Date: Date:

CITY OF NEWBURYPORT FY 2023

TRAN00148_01_30_2023

RECEIVED CITY CLERK'S OFFICE NEWBURYPORT, MA

N24 P12:47 **TRANSFER/APPROPRIATION REQUES**

Department:	Mayor			
Submitted by:	Mayor Sean R. Reardon	Date Submitted:	1/3	30/2023
Transfer From: Account Name:	RRFA Sale of Municipal Buildings	Balance:	\$	593,500.00
Account Number:	2760-59630	Category:		n/a
Amount:	\$200,000.00	Trans I/O:	\$	÷.

Why Funds Are Available:

Proceeds from the sale of the former Kelley School. Sale of real estate proceeds are governed by M.G.L. c. 44, § 63, which allows for funds to be used for any purpose(s) for which the city is authorized to incur debt for a period of five years or more. Funds are appropriated by a simple majority vote of the City Council.

Transfer To:

Account Name:	NYS Center Design Services	Balance:	\$	
Account Number:	3907-49700	Category:	-	n/a
Amount:	\$200,000.00	Trans I/O:	\$	
Why Funds Are Needed				

why Funds Are Needed:

The cost for design services for construction of a Youth Services Center at 59 Low Street has been estimated at \$200,000. This estimate includes design development, creation of construction documents, bidding and construction administration. Note that while EGA Architects provided the enclosed cost estimate, the designer for the project will be selected in accordance with M.G.L. c. 7C, §§ 44-58, the state designer selection law.

Sean R. Reardon, Mayor:

Ethan R. Manning, Auditor:

City Council Action:

Date: Date:



January 24, 2023

Kim D Turner Manager of Special Projects City of Newburyport 60 Pleasant Street Newburyport, MA 01950

Re: City of Newburyport – 59 Low Street Youth Services

Dear Kim,

Thank you for considering us, and please find attached our proposal for the Newburyport Youth Services Center at 59 Low Street. It is our understanding that you would like us to provide full architectural design services from design development through construction administration for the proposed renovation and addition. Our scope is based upon the schematic design developed last fall by the City of Newburyport, NYS and EGA.

Our services will include customary structural, mechanical, plumbing, fire protection and electrical engineering services as well as interior design, acoustical engineering, and cost estimating. The acoustical engineering will be related to noise control in the hang out space and the new gym. Our proposed fee for the project is \$195,000.00.

If you have any questions or concerns, please do not hesitate to call me at 978-500-3738. We thank you for the opportunity to submit this proposal and we look forward to working with you on this exciting project.

Sincerely,

Scott Hall, Principal Registered Architect, P.E. EGA Architects, P.C.

Cc: Scott Hall, Katie Flaherty



SCOPE OF SERVICES

- Included Services The base design services shall include the following:
 - Architectural design for the entire project
 - Mechanical and Electrical engineering
 - Structural engineering
 - o Plumbing engineering
 - Fire Protection engineering NFPA 13 Scope Only Final design and engineering to be prepared by sprinkler sub-contractor.
 - o Interior Design Services
 - o Cost Estimating
 - o Acoustical engineering for hangout space, gym and MEP systems
 - o Compliance with Mass Building Code, ADA and other applicable codes.
 - The following low voltage electrical systems are included in basic services:
 - Fire Alarm System
 - HVAC Controls
 - Exterior Door Control hardware
 - Cable TV and Data wiring devices and wiring to demark room
 - Security Cameras

•	Design Phases		Percent of Fee
	0	Design Development	25%
	0	Construction Documents	50%
	0	Bidding	5%
	0	Construction Administration	20%

• Schematic Design

o Completed in previous phase.

• Design Development

- o Incorporate into the project design and cost issues from previous phase
- Further refine the design and incorporate greater detail including elevations, sections, typical details, and preliminary MEP systems
- Meet with Owner to review progress
- o Review documents with Owner to assess budget
- Review design with Authorities Having Jurisdiction as needed.



- o Revise documents based upon feedback from Owner
- Review cost estimate prepared by PM&C

• Construction Documents

- Incorporate into the project design and cost issues from previous phase.
- Coordinate final design with all design team members. Provide design sketches to design team members including engineers and interiors for final coordination
- Provide options and recommendations to assist team with the project budget and schedule
- Finalize Construction Documents for Bidding to Sub-Contractors and building permit submission
- Coordinate full Construction Documents set with all design teams members and issue review set
- Review cost estimate prepared by PM&C

• Construction Administration

- o Attend project site meetings for coordination of design
- Review contractor's shop drawing submittals
- o Respond to contractor's requests for information and questions
- o Issue supplemental drawings and instructions as required
- Review and certify Application of Payments from contractors
- o Prepare punch-lists for design items for Substantial and Final Completion
- Provide required documentation for all occupancy requirements
- o Issue Substantial and Final Completion documentation
- Develop punch list with Contractor and check completion

ASSUMPTIONS

- The project will be designed and constructed in one phase
- Cost estimates shall be prepared by PM&C
- The approximate square footage of the scope is 11,000 sf.



EXCLUSIONS

- Zoning Consultant
- Traffic Consultant
- Civil Engineering
- Geotechnical Engineer
- Structural Peer Review (if required)
- Low Voltage Consultant

FEE SUMMARY

Company	Discipline	DD	CD	Bid	CA	Total
		25%	50%	5%	20%	100%
EGA	Architect	\$24,087.50	\$48,175.00	\$4,817.50	\$19,270.00	\$96,350.00
Wellesley Design	Interior Design	\$7,875.00	\$15,750.00	\$1,575.00	\$6,300.00	\$31,500.00
Shelley Engineering	Structural	\$5,562.50	\$11,125.00	\$1,112.50	\$4,450.00	\$22,250.00
BLW Engineers	MEP Engineers	\$7,600.00	\$15,200.00	\$1,520.00	\$6,080.00	\$30,400.00
Cavanaugh Tocci	Acoustical	\$2,375.00	\$4,750.00	\$475.00	\$1,900.00	\$9,500.00
PM&C	Cost Estimate	\$1,250.00	\$2,500.00	\$250.00	\$1,000.00	\$5,000.00
Totals		\$48,750.00	\$97,500.00	\$9,750.00	\$39,000.00	\$195,000.00

REIMBURSABLES

- Reimbursable expenses such as printing, travel and postage are included in the fee above.
- EGA shall invoice on the first of each month for all work completed in the prior month.



ADDITIONAL SERVICES

- Additional services, if needed, shall be performed on an hourly basis in accordance with Schedule A attached. EGA shall receive written approval from the Owner prior to performing any additional services.
- The contract for the project shall be the AIA Document B101 2017 edition.

AGREEMENT

If you agree with this proposal, please indicate by signing below and returning one copy of this document to our office.

Sincerely,

Scott Hall, President Registered Architect, P.E. EGA Architects, P.C.

Agreed to:

Kim D Turner, Manager of Special Projects

Date



SCHEDULE A SCHEDULE OF HOURLY RATES

CLASSIFICATION	HOURLY RATES
CEO/President	\$ 220.00
Officer	183.00
Senior Project Manager	150.00
Project Manager	135.00
Project Architect/Designer	125.00
Intern Architect	110.00
Architectural Drafter	92.00
Graphic Design	90.00
Executive Administration	73.00
Clerical	61.00



Interior Design & FF&E Management Services Proposal For



Newburyport Youth Services Newburyport, MA

> In Partnership with EGA Architects







Interior Design & FF&E Management Services Proposal

We are pleased to submit our scope of services for the interior design of the Newburyport Youth Services in Newburyport, MA project. We would work under the direction of Newburyport Youth Services (herein referred to as Owner) and in coordination with EGA Architects (herein referred to as the Architect).

ARTICLE A: SCOPE OF PROJECT:

The project consists of:

- New construction of a 3904 s.f. pre-fab Gymnasium
- Rehab of a 6,057 s.f. Existing Building
 - o Hangout
 - o Study
 - o Art
 - o Multi-Purpose
 - o Pre-School
 - o 4 Offices
 - o 2 Toilets
 - o **Storage**
 - Upper Loft Storage Only
- New 1573 s.f. 'Link' Addition between Existing and New Gymnasium
 - o Vestibule
 - o Lobby
 - Reception/Concession
 - o 2 Large Toilets
 - o 2 Offices
- Outdoor Area
 - o Spaces TBD

We will provide design, documentation, and limited construction management for interior building finishes. We will select, specify, and manage the procurement of furniture and furnishings for common areas, corridors, and back of house spaces.

ARTICLE B: SCHEDULE and DESIGN PROCESS:

The design process for building finishes will follow the architect's format and schedule. WDC will cross coordinate with the Architect, regarding building completion schedules and changes to the building made during construction that affect furniture placement & implementation of finishes and other goods.

1. Schematic Design:

<u>a) Reviews and Program Definition:</u> We will meet with the Owner and Architect to review needs, desires, goals, and the overall interior design approach for the project.

<u>b) Space Planning and Furniture Layout:</u> Using Architect's CAD Base Drawings, we will prepare furniture layouts based on the program. WDC will coordinate adjustments that will improve furniture placement, circulation patterns, and multiple purpose layouts if needed.



c) Preliminary Budget and Furniture Listing: A preliminary budget for furniture, draperies, and artwork will be prepared using budget selections from our previous experience.

<u>d) Materials Concept:</u> We will prepare a concept for the project indicating the types and quality of finishes, materials, furniture, and furnishings. We will produce preliminary plans or narrative to locate finishes.

2. Design Development:

<u>a) Generic Finish Schedule:</u> We will develop a legend and room listing for finishes in coordination with the Architect's room number designations. This list of proposed types of finishes for flooring, walls, baseboards, etc. by room will supply detailed information of type and manufacturer of acceptable products for specifying. The Architect's plans and our interior elevations will be developed for identifying and annotating the location of finishes.

<u>b) Plumbing & Light Fixtures:</u> We will assist the Architect with the selection and location of decorative plumbing and lighting fixtures.

<u>c) Millwork:</u> We will provide sketch design to assist the architect with millwork and interior elevations for public spaces and standard resident unit types.

<u>d) Furniture Concepts:</u> We will develop the furniture plans, make selections, and prepare furniture concepts to reflect the progress of the design.

<u>e) Design Presentation of Key Areas:</u> We will present finish boards of materials for key spaces. These will show proposed color schemes, furniture catalog cuts, upholstery and drapery fabric, color and finish samples, etc. for review with the Owner and Architect. This meeting will be held at WDC.

<u>f) FF&E Reviews:</u> We will provide an FF&E package, limited to furniture, window treatments, artwork, and accessories.

3. Contract Documents:

<u>a) Final Finish Documentation for Interior Building Finishes:</u> We will coordinate the final finish schedule by room for color and finish choices including paint, wallcovering, carpet, vinyl tile, etc. This listing will develop in detail from the generic finish schedule and legend prepared under Section 2a. We will provide flooring and wall accent location plans.

b) FF&E Design Coordination: We will coordinate updated furniture plans to coordinate with the latest drawings from the architect. This information will be prepared in a format to be included with the construction drawing set.

4. Construction Administration:

<u>a) Interior Finish Construction Administration:</u> We will review and respond to applicable shop drawings, submittals and RFIs. We will review all finish substitutions for design and performance intent. We will also answer questions from the site, channeled through the Architect, as they relate to our scope of work.



b) Document Revisions and FF&E Coordination: We will coordinate with the Owner and the Project Architect to determine whether changes during construction warrant modifications to plans and specifications for furniture, window treatments, art, and accessories. This documentation will be updated in a timely manner to issue purchase orders.

ARTICLE C: PROCUREMENT AND IMPLEMENTATION:

<u>1) Furniture Selection and Documentation:</u> We will write detailed proprietary specifications that organize furnishings by room and manufacturer. These Selections will match approved items that meet the budget. They will include tagging instructions that key into locations on our coded furniture floor plans.

<u>2) Furniture Implementation:</u> We will use our documents to coordinate procurement, warehousing, delivery, installation, and placement of furnishings on site. We will tag furniture and collect required flame verification for the local authority, providing the Owner with necessary copies for their records.

<u>3) Non-Furniture Selection and Installation Management:</u> We will write proprietary specifications for Window Treatments and coordinate fabrication and installation with an approved vendor. We will provide (virtual) site consultation for measurements and modifications for site conditions. We will work with an approved art consultant to research, curate, mat, frame, warehouse, deliver, place, and install art pieces. Accessories not purchased through the FF&E package will be bought, warehoused, delivered, and placed by WDC.

<u>4) Final Inspections:</u> We will assist with final inspections confirming that all major moveable items have been properly delivered and installed. Installation of items received after the substantial completion of the basic installation period will be supervised by the Owner's staff with advice provided by us.

ARTICLE D: PROPOSED FEES:

WELLESLEY DESIGN CONSULTANTS

The proposed fees for Interior Design and Management Services by section are as follows:

A.	Scope of Project	Included	
B1.	Schematic Design:	\$4,725	
B2.	Design Development:	\$7,875	
B3.	Contract Documents:	\$2,520	
B4.	Construction Administration:	\$4,725	
C1.	Furniture Selection & Documentation:	\$4,095	
C2.	Furniture Implementation:	\$2,835	
C3.	Non-Furniture Select. & Install. Mgmt:	\$3,780	
C4.	Final Inspections:	\$945	_
Total		\$31,500	



ARTICLE E: TERMS & CONDITIONS

Invoices for Interior Planning and Design Services will be submitted monthly to reflect progress on the project. We will be reimbursed for direct expenses incurred in relation to the provision of our professional services for travel and sustenance, plotting, printing, package deliveries, sample costs, and duplicate presentation boards.

For all furniture, artwork, accessories, marketing materials, and other items, which we purchase directly for the project, we will be reimbursed for the actual cost to us, including freight, installation and shipping, plus 10-25% for service, and handling. Deposit requests require a 15-day turnaround. Late deposit payments may incur an additional expediting fee of 5% to meet project schedule. There will be no markup by WDC on items which are directly purchased by Owner through their own vendors. Should WDC be responsible for managing vendor schedule and/or funds on behalf of Owner, a 10% convenience fee will be charged regarding respective products.

Payment will be within a reasonable period from the submission of our invoice, however, not to exceed 30 days. Late payments will incur a charge of 1.5% interest (compounded monthly).

Additional Interior Planning and Design Services, as requested and agreed upon, will be billed on an hourly basis, at \$260 per hour for Principals, \$210 per hour for Project Manager Designers, \$160 per hour for Designers, \$125 per hour for Junior Designers and Assistants. Please note that these rates are effective through 12/31/2024 and will increase annually by 4% annually thereafter. The project fee listed above is valid if work launches within 6 months from date of issue. Projects that stall for more than a year, once project commences, will be subject to a startup fee. Not included in standard scope: Interior rendering assistance, marketing boards, committee meetings, extensive value engineering/redesign, and multiple design, installation, and/or implementation phases.

WDC requires 10% of the total project retainer fee (which will be immediately applied to the SD service fee) and a signed contract to commence work. In lieu of a separate invoice, the start-up retainer fee would be **\$3,150 with signature below**.

ARTICLE F: LIABILITY

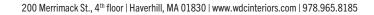
WDC liability lies within interior design services only.

ARTICLE G: COPYRIGHTS

Wellesley Design Consultants holds the copyright to all their Instruments of Service produced for this project. Designs are protected by United States Copyright Law, Section 102, Title 17 single use permission. Any unauthorized use of this information is at the Owner's own risk and without liability to WDC. Contract documents shall not be used as prototype documents unless WDC written permission is obtained. WDC reserves the right to include photographs of the finished project in promotional & professional materials.

Accepted by	_
-------------	---

Print Name





WDC Overview:

January 12, 2023

Since our inception in 1985, Wellesley Design Consultants, Inc. (WDC) has developed expertise in senior care, (ranging from private cottages to full scale CCRCs: Continuing Care Retirement Communities), and has further diversified to include, corporate offices, medical office buildings, luxury high-rise, multifamily, student and affordable housing communities. We have experience in LEED Certified Buildings, WELL Building Standards, and Passive House **Sustainable Green Building** practices.

WDC designs, details and specifies building finishes, furniture, fabrics, artwork, window treatments and accessories with **Universal Design** in mind. All of our selections go through rigorous consideration for durability, cleanliness, sustainability, and best value.

We work closely with trusted vendors and reputable manufacturers to create detailed **Budget Friendly** specifications for each project. These relationships are invaluable during Value Engineering and product delivery schedules, especially during the current supply chain disruptions. We execute complete FF&E packages as a full-service interior design firm. We have expertise with private, subsidized, public, and State **Purchasing Protocols**. This allows us to provide accurate preliminary pricing and planning.

Our award-winning firm prioritizes **Innovation** through CEUs and current product knowledge. We actively engage with other industry leaders through symposiums, industry events, conferences, product design and webinar panels. WDC believes in giving back to the community and is a regular participant in local fundraising initiatives.

WDC is passionate about inspiring the human spirit, amongst all the other holistic considerations. Our design culture reflects the human experience through all the senses to create 'Home'. Biophilia, calming acoustics, balanced lighting, and tactile textiles are just a few of the elements used to create thriving environments. This awareness is a bountiful base to collaborate and create groundbreaking communities that make a difference, not only for its inhabitants, but also for the greater community.

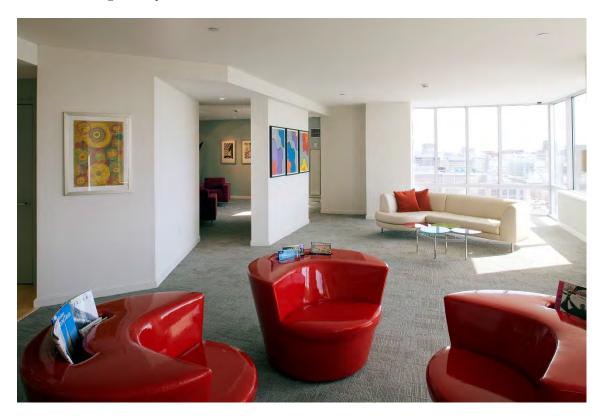
Faith Marabella, CEO/President, Reg. Architect, LEED AP, Senior Design Principal:



Faith has long-term relationships with clients that span multiple projects over 25 years. She embraced Interior Design, from practicing as an Architect, when she recognized she could better advocate for the residents and staff in this role. Faith is a founding board member of The **Ageless Living Collaborative** (ALC), which is a nonprofit collective of Architects & Interior Designers that presents a strong voice for dignified design. She consults for building products and furniture manufacturers to drive universal design. She graduated from **Iowa State University** with a Bachelor of Architecture degree.



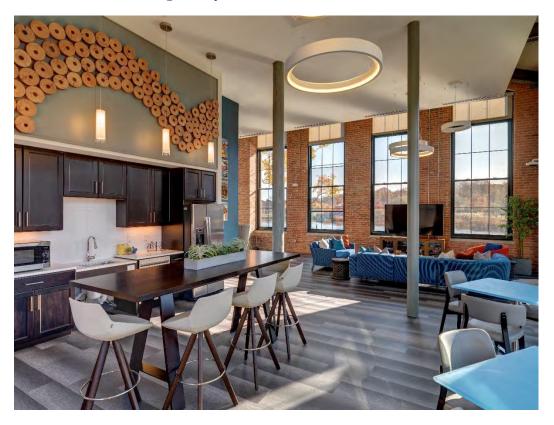
Youth Room Examples by WDC:







Youth Room Examples by WDC:







Youth Room Examples by WDC:







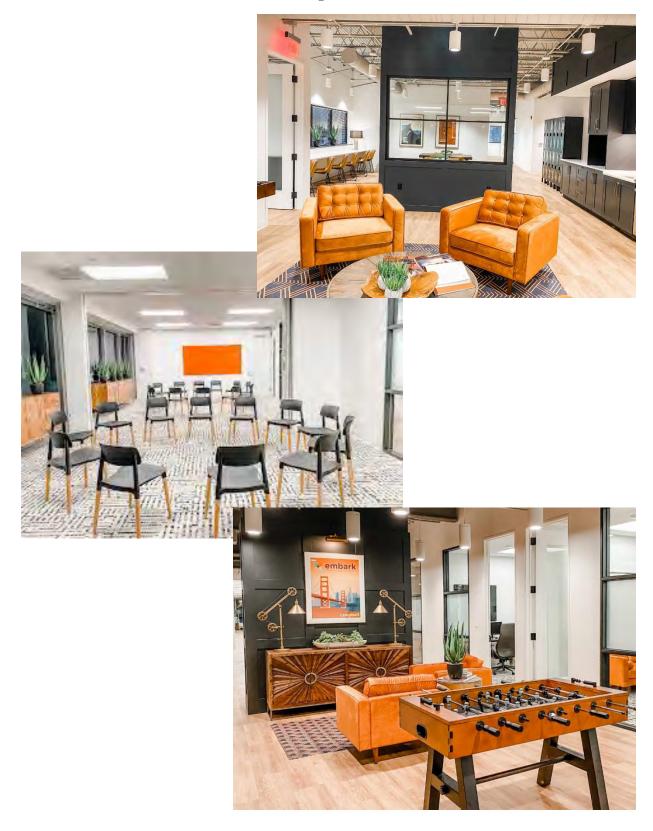
Current Youth Center Trends & Concepts:







Current Youth Center Trends & Concepts:



STRUCTURAL CONSULTANTS

Structural Engineer (SE):	Shelley Engineering, Inc. (SEI)	Project No.	2023-TBA
<u>structurur Engineer</u> (SE)		110 000 1100	2020 IDII

Client:EGA ArchitectsAttn:Scott Hall1 Vernon StreetNewburyport, MA 01950

Date: January 20, 2023

Project Name: Newburyport Youth Services

<u>Project Description</u>: We have reviewed RFP for the revovation and expansion to the Newburyport Youth Services building. We understand the structural renovations will be minimal, but new insulation will be added to the existing roof. We also understand the addition will consist of a +/-1,000 sq. ft. wood framed connector to a +/-3,800 sq. ft. pre-engineered steel framed modular gymnasium.

We assume the building will utilize a conventional soil supported foundations, with spread and strip footings.

Scope of Services: SEI will provide complete structural designs services for this project, which will include the following:

a. Schematic Design Phase:

SEI will study the layout of the wall locations of the building inorder to determine the most efficient framing direction and system.

b. Design Development Phase:

SEI will develop basic framing plans and sections, based on our schematic system selection. The basic foundation systems will be laid out, with appropriate sections drawn for budgetary pricing. We will submit drawings as required by EGA and the construction manager.

c. Construction Document Phase:

SEI will provide complete structural framing plans, sections, details, notes and specifications as required to produce a complete structural document package suitable for construction. We will respond to any and all comments from a peer review. Our drawings will be fully dimensioned, as required, for construction.

d. Construction Administration Phase:

SEI will provide Construction Administration services for this project, which will include shop drawing review, change orders, field direction and response to field questions. We will provide (3) construction site visits per building.

<u>90 BRIDGE STREET, WESTBROOK, MAINE 04092 PHONE (207)</u> 854-5465 FAX (207) 854-8706

SHELLEY ENGINEERING, INC.

STRUCTURAL CONSULTANTS

Fee Proposal:

For this project and the outlined scope of services above, we propose a lump sum structural design fee of \$12,250. This fee is based on minimal structural work in the existing building, full design of new connector and just the foundation design for the new modular gymnasium.

Our fee breakdown per phase is as follows:
Scematic Phase:\$1,500.Design Development Phase:\$2,500.Constructions Document Phase:\$6,250.Construction Admin. Phase:\$2,000.

We also propose an allowance of \$10,000 for structural analysis of the existing roof to support the potential for increased roof snow load due to the additional insulation being added to the roof. This allowance does not include the design of any structural reinforcing (if required).

Cost per additonal site visits (beyond inclusive 3) \$750.

- e. Reimbursibles: Mailing of drawings at cost x 1.1 Mileage at current rate per mile.
- f. Hourly Rates: Principal-2: \$85/hr.

g. Professional Liability Insurance:

We carry E/O Insurance, with \$1,000,000 limit, and a \$25,000 deductible. Insurance certificates available upon request.

h. Exclusions:

We will be provided with a geo-technical report prepared by others, stating the allowable soil bearing pressure and design wall pressures.

Special Conditions: We will begin services upon receipt of a signed contract.

SHELLEY ENGINEERING, INC.

STRUCTURAL CONSULTANTS

Offered by (SE):

Accepted by (Client):

Patrick Jordan

(signature)

(signature)

Patrick Jordan., P.E. (printed name/title)

(printed name/title)

(date)

Please contact me should you have any questions. We greatly appreciate the oppourtunity to provide you with this proposal and look forward to working with you on this project.

Sincerely:

Patrick Jordan, P.E.

Mr. Scott Hall, PE EGA Architects 12 Auburn Street Newburyport, MA 01950

RE: Newburyport Youth Services 59 Low Street Newburyport, AM

Dear Mr. Hall:

In accordance with your request, BLW Engineers, Inc. (BLW) is pleased to submit a Scope of Services and Proposed Fee to provide Mechanical Engineering Services at the above referenced facility.

Scope of Services

Engineering Services include HVAC, Plumbing, Fire Protection and Electrical systems design in accordance with the following:

- HVAC design shall include heating, ventilating and air conditioning systems for the proposed buildings.
- Plumbing design shall include sanitary drainage system for all plumbing fixtures; natural gas distribution to all gas utilization equipment; storm drainage system; domestic cold water system; domestic hot water system; and plumbing fixtures and equipment for the proposed buildings.
- Fire Protection design shall include a wet type sprinkler system for the proposed buildings except for unheated spaces of combustible construction where a dry system will be required.
- Electrical design shall include lighting; power including new service, fire alarm including fire protective signaling and automatic fire detection systems; low voltage systems, and life safety system for the proposed buildings.
- All systems design shall conform to applicable building codes.

Construction Administration Services will include shop drawing review, answering of contractor questions and mechanical or electrical site visits.

Record Drawings for each discipline shall be provided to the owner at the completion of the project by the Contractor. BLW will provide electronic files of the mechanical systems design to the Contractor for the production of Record Drawings.

Assumptions

- Electronic plans of the proposed building will be provided by EGA.
- BLW will provide one reproducible contract documents for each submission.

- EGA will furnish hydrant flow test data to BLW for design of the sprinkler systems. A hydrant flow test has not been included in this proposal.
- Fire protection engineered design documents are not included in this proposal.
- Documentation for owner related rebates from utility are not included in this proposal.
- Value Engineering for substantive changes to drawings are not included in this proposal.
- Acoustical related services have not been included in this proposal.
- Commissioning of mechanical and electrical systems is not included in this proposal.
- The proposed project consists of a new youth center with classrooms, common rooms, office area, entrance and gym that is approximately 10,800 square feet.

Proposed Fees

Project Tasks	
Design Development	\$ 12,400.00
Construction Documents	\$ 12,500.00
Construction Administration (4 Site Visits)	\$ 5,500.00
Total	\$ 30,400.00

Site visits will be provided for the lump sum cost of 600.00. Additional services will be provided on an hourly basis.

Invoices for the above stated fee would be submitted monthly, based on a lump sum, percent complete basis by task. Reimbursable expenses will be invoiced at cost plus ten percent.

This proposal is subject to the terms and conditions as set forth in the attached BLW Engineers, Inc. Standard Contract Terms dated January 1, 2022.

Thank you for the opportunity to present this proposal. If you have any questions or need additional information, please feel free to contact our office.

Very truly yours,

Accepted:

BLW Engineers, Inc.

EGA Architects

Bill Scanlon

Bill Scanlon, PE Principal

date:



Mr. Scott Hall EGA Architects, P.C. One Vernon Street Newburyport, MA 01950

SUBJECT: Newburyport Youth Services, 55 Low Street Proposal for Acoustical Consulting Services

Dear Scott,

We would be pleased to provide acoustical consulting services for the new Physical Education Center in Lincoln RI. The physical education center will include a large gymnasium and associated support spaces. Based on correspondence with you, and information sent, we propose the following scope of work and fee.

Scope of Work

Task 1 – Gym and Hang Out Space Acoustics

Based on the planned uses for the gym and hang out space, we will set design goals for reverberation time and control of flutter echo. Based on drawings provided by your office, we will review planned room finishes in these spaces to calculate the reverberation time. Based on our review we will provide a recommendations report including sketches noting general placement of sound absorptive finishes and manufacturers information for the recommended materials.

Task 2 – Interior HVAC Review

We will review heating and ventilation equipment serving the gym and hang out space and we will provide recommendations for noise and vibration control. Our review and recommendations will be summarized in a report. Our recommendations will be to meet typically acceptable interior sound based on our experience and industry best practices.

Task 3 – Construction Administration

We can be available to review shop drawings, and submittals for HVAC equipment, noise control elements, and room finishes. We can also be available to answer questions that may arise.

Deliverables and Meetings

We will provide written reports with sketches and manufactures' information as needed for your (and the project MEP engineer's) use in preparation of drawings and specifications. We do not anticipate any out of office meetings for our work on this project, though we cam be available for teleconferences.

Consulting Fees

Based on the scope of work listed above, we recommend a fixed fee of \$6,300 through completion of construction administration. Based on estimates of staff time we expect the following breakdown of fee by design phase.

Task 1 – Gym and Hang Out Space Acoustics	\$4,000
Task 2 – Interior HVAC Review	\$4,000
Task 3 - Construction Administration	\$1,500
Total	\$9,500

The fee allowances may be considered upset limits based on our understanding of the project and are not to be exceeded without your approval.

Exceptions to Project Scope:

Meetings at your office or at the project site can be provided as needed at our standard hourly rates and including reimbursable travel expenses. Work that will not be provided as part of the scope listed above includes the following (in the case that these efforts are required, we can provide proposals for additional services).

- Exterior HVAC review for sound radiated to neighboring properties and buildings is excluded.
- Post-construction site visits, sound measurements, review and recommendations for mitigation
 of mechanical noise and/or vibration issues if noise/vibration control recommendations
 provided by our firm are not properly documented or implemented during construction.
- Additional services in the case that significant VE efforts result in the need for CTA to significantly duplicate effort for HVAC noise control, room acoustics, or sound/impact isolation constructions. We anticipate a reasonable amount of VE review is expected and have allowed for this in our fee proposal.
- LEED or other green building documentation for acoustical credits/requirements.
- Construction noise review and recommendations.

Thank you for asking Cavanaugh Tocci to provide the proposal for acoustical consulting services. If you have any questions, please do not hesitate to call.

Sincerely, CAVANAUGH TOCCI Kut J MKK

Kent F. McKelvie, Principal Consultant Accepted by:

Signature

kmckelvie@cavtocci.com

Name/title

Date

GP23 - Newburyport Youth Services Building - Acoustics Proposal.

CAVANAUGHTOCC

CAVANAUGHTOCCI

Standard Schedule of Charges

For all consulting assignments, invoiced costs for services are based on professional staff time spent and out-of-pocket expenses incurred during the course of the project. Professional staff time is charged on an hourly basis in accordance with the following rates. These rates include all indirect labor and other firm overhead costs:

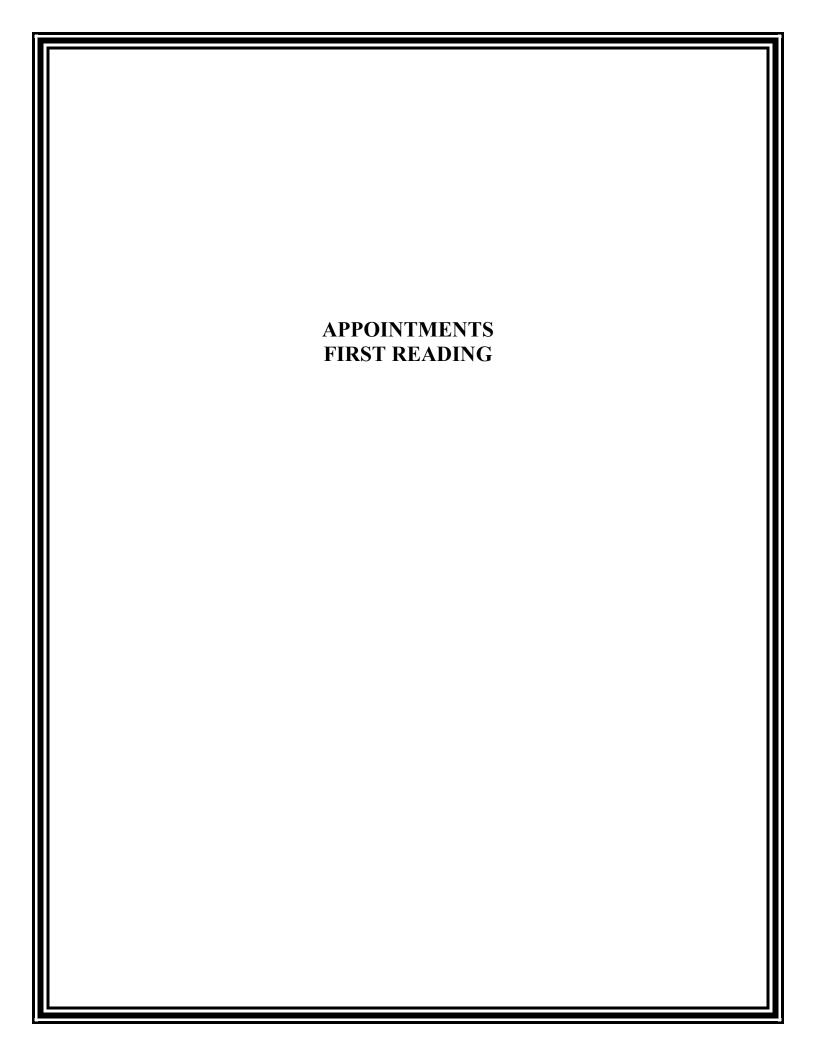
Senior Principal Consultant	\$300 – \$350 per hour
Principal Consultant	\$200 – \$300 per hour
Associate Principal Consultant	\$180 – \$230 per hour
Senior Consultant	\$150 – \$200 per hour
Staff Consultant	\$120 – \$150 per hour
Technical Assistant/CAD Designer	\$80 – \$130 per hour

Professional staff time for travel to and from field conferences, project site measurements, and inspection visits are billed on a portal-to-portal basis from our offices in Sudbury, Massachusetts.

Direct project expenses are billed at cost and include all costs incurred for measurement instrumentation, computer modeling software use, and other significant charges directly associated with the consulting assignment. Expenses are billed at direct cost with no markup.

Invoices for services are billed on a monthly basis and are due net 30.

Effective 01 January 2023





CITY OF NEWBURYPORRECEIVED Office of the Mayor CITY CLERK'S OFFICE NEWBURYPORT, MA SEAN R. REARDON, MAYOR 2023 JAN 11 A 11: 47 60 Pleasant Street - P.O. Box 550 Newburyport, MA 01950 978-465-4413 phone Mayor@cityofnewburyport.com

То:	President and Members of the City Council
From:	Sean R. Reardon, Mayor
Date:	January 23, 2023
Subject:	Appointment

I hereby appoint, subject to your approval, the following named individual as a member of the Water/Sewer Commission. This term will expire February 1, 2025.

Kim Emmons 9 Doe Run Drive Newburyport, MA 01950

m Il M

Kim Emmons Regional Sales Manager Samsung

Symbol Symbol

Mayor Sean Reardon Newburyport City Hall 60 Pleasant St

DEAR MAYOR REARDON,

I am looking to serve the community where I am so fortunate to live. As a resident for over 10 years and a mother of two nine year old twin daughters, I understand the importance of preserving our rich past. I would like for my children's generation to be able to walk through the streets and understand our abundant history for years to come. As a result, I would like to be considered as a volunteer on the Community Preservation Act Committee.

In my professional life, I have achieved the following transferable skillsets:

- Responsible for managing budgets in excess of \$25M while yielding a positive ROI
- Served as a liaison between opposing teams during a merger which resulted in a group consensus
- Contract negotiation skills

On a personal note, due to my great appreciation of Frank Lloyd Wright's architecture, I began the process of becoming a docent while I was living in Chicago. Although, love and marriage brought me here before I could finish. I would like to finish preserving and sharing our local history with others.

Thank you for taking the time to consider me as a volunteer on the Community Preservation Act Committee.

Sincerely, Kim Emmons

KIMBERLY EMMONS

Boston, MA Ksloan01@gmail.com 978-476-1046

Account Management | Sales Leader | Launching Unknown Brands

Contract Negotiation Exceeding Quota Managing Remote Teams Merger & Acquisition Emerging Technology Training Business Development

Industries : Emerging Technologies, Telecommunications Degree : BA, Business and Communications, Baldwin-Wallace College

PROFESSIONAL EXPERIENCE

Regional Sales Manager, Samsung, North East

Launched Wayfair.com as a premier partner of Samsung Digital Appliances. Negotiated with BJ's Warehouse to launch test cities to sell premium products.

- Manage comprehensive sales process and generated incremental sales revenue to exceed budget by developing and utilizing targeted programs. Managed the daily flow/exchange of information between the customer and multiple marketing teams in order to determine appropriate pricing/placement. Developed and maintained long term business relationships.
- Conceptualized and developed original/customized program for newly launched channels to maximize revenue and profit.

Area Sales Manager, HTC, East Coast

Regional Sales Manager, HTC, Northeast Territory

Launched unknown "HTC Brand" and product within Verizon and Sprint by tenaciously pursuing decision makers, aligning goals and creating opportunities to ensure that HTC was top of mind within Enterprise, Small Business, Indirect, COR and Marketing channels.

- Solved lack of supply issue by closing non-traditional points of distribution.
- First to establish exclusive product trainings by coordinating efforts with various levels of internal and external organizations. Sold trainings by developing partner solutions.
- Acted as subject matter expert for HTC products, operating systems, and relevant 3rd party applications to be able to deliver a complete evaluation to clients.
- Accelerated sell-through and overcame objectives in a highly competitive environment by creating solutions and a need for HTC.
- Managed multiple accounts which included Verizon, T-Mobile, Sprint, Circuit City and TELUS.
- Sales Person of the Year 2008, 2010 and Sales Leader Q1 Q2 2010

Senior Manager - Strategic Partner, Sprint, Boston, MA

Lead the East and Midwest Indirect Sales Channel. Promoted to the Affiliate Integration team. Emphasis included, developing sales strategies with senior staff, marketing and promotional implementation, sales manager training and relationship building.

(2012 - 2015)

(2016 - current)

(2006 – 2012)

(2003 - 2006)

1

Ksloan01@gmail.com

 Integrated multi-billion dollar acquisitions into Sprint's organization by leading the indirect sales strategy. Approach included contract conversion, compensation analysis, process solutions, organizational alignment and working with various functional senior leaders to ensure inclusion into Sprint's culture.

Senior Manager - Strategic Partner, Sprint, Boston, MA (cont') (2003 – 2006)

- Viewed as a partner during Franchise litigation and was able to ensure targets were met while growing their business.
- Formulated strategic sales and business development plans with Affiliates which resulted in attainments of corporate performance goals.
- Improved Affiliate/Sprint relationship at all levels through consistent contact, issue resolution and involvement in sales activities during litigation

Regional Indirect Sales Manager, Sprint, Chicago, IL

(2000 - 2003)

Implemented quarterly sales strategies to indirect sales makers and took responsibility for execution. As an interface between field personnel and corporate developers, areas of opportunities were corrected by developing process improvements. Simultaneously maintained relationships at key National Retailers to establish, nurture, and maintain strong working relationships at all levels.

- Oversaw Indirect Managers and guided them in maintaining relationships with over 900 retail partners
- Consulted newly hired Indirect Managers on operational activities, relationship management and initiated Merchandising Sales Manager training
- Achieved over 110% of Region quota for 2001, 2002 and 2003

Indirect Account Executive, Sprint, Cleveland, OH

(1998 - 2000)

Identified new points of distribution as well as maintained relationships with National Distributors which resulted in a successful market entry strategy into Cleveland, OH. Assisted distributors in the development of sales strategies, incentive programs, product mix, promotions, and effective use of co-op advertising funds.

- Developed distribution channel strategy that increased sales by over 300% within two months
- Continuously managed dealer distribution to ensure market share and profitable results
- Executed and maintained distribution agreements and compensation plans

AWARDS

HTC Sales Leader Q1 – Q2 2010, HTC Salesperson of the Year 2010 & 2008, Strategic Planning Award 2005, Fast Growth Award 2005, Regional Employee Recognition 2003 & 2002, Sprint PCS Team Player, Sprint PCS Sales Achievement Award 125% of quota 2000

APPT00369_01_30_2023



CITY OF NEWBURYPOINT CLERK'S OFFICE Office of the Mayor NEWBURYPORT, MA SEAN R. REARDON, MAYOR 1023 JAN 20 A 11:23

60 Pleasant Street - P.O. Box 550 Newburyport, MA 01950 978-465-4413 phone mayor@cityofnewburyport.com

To:	President and Members of the City Council
From:	Sean R. Reardon, Mayor
Date:	January 30, 2023
Subject:	Re-appointment

I hereby re-appoint, subject to your approval, the following named individual as a member of the Conservation Commission. This term will expire on February 1, 2025.

> Carole Wagan 9 Olive Street Newburyport, MA 01950

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APPT00370_01_30_2023



CITY OF NEWBURYPORCTYCLERK'S OFFICE Office of the Mayor Sean R. Reardon, Mayor 2023 JAN 20 A II: 23

60 Pleasant Street - P.O. Box 550 Newburyport, MA 01950 978-465-4413 phone mayor@cityofnewburyport.com

То:	President and Members of the City Council
From:	Sean R. Reardon, Mayor
Date:	January 30, 2023
Subject:	Re-Appointment

I hereby re-appoint, subject to your approval, the following named individual as a member of the Conservation Commission. This term will expire on February 1, 2025.

> David Vine 47 Marlboro Street Newburyport, MA 01950

Macall

APPT00372_01_30_2023



CITY OF NEWBURYPORT RECEIVED OFFICE OF THE MAYOR NEWBURYPORT, MA SEAN R. REARDON, MAYOR

2023 JAN 20 A 11: 23

60 Pleasant Street - P.O. Box 550 Newburyport, MA 01950 978-465-4413 phone mayor@cityofnewburyport.com

To: President and Members of the City Council

From: Sean R. Reardon, Mayor

Date: January 30, 2023

Subject: Re-Appointment

I hereby re-appoint, subject to your approval, the following named individual as a Director of Finance/City Auditor. This term will expire on February 1, 2026.

Ethan Manning 31 Howard Street Newburyport, MA 01950

1 Meardo



CITY OF NEWBCERKS OFFICERT OFFICE OF MEMBUMAGORIA SEAN R. REARDON, MAYOR 2023 JAN 23 P 2:45 60 Pleasant Street - P.O. Box 550 Newburyport, MA 01950 978-465-4413 phone Mayor@cityofnewburyport.com

To: President and Members of the City Council

From: Sean Reardon, Mayor

Date: January 30, 2023

Subject: Re-Appointment

I hereby re-appoint, subject to your approval, the following named firm to serve in the office of City Solicitor. This term will expire February 1, 2024.

KP Law 101 Arch Street, 12th Floor Boston, MA 02110

Je. N. Nearde



CITY OF NIEVER RECEIVED OFFICE OF WEWER MAYOR SEAN R. REARDARY MAYOR SEAN R. REARDARY MAYOR

60 Pleasant Street - P.O. Box 550 Newburyport, MA 01950 978-465-4413 phone mayor@cityofnewburyport.com

To: President and Members of the City Council

From: Sean R. Reardon, Mayor

Date: January 30, 2023

Subject: Re-Appointment

I hereby reappoint, subject to your approval the following named individual as a member of the Affordable Housing Trust. This term will expire on February 1, 2025.

> Karen Wiener 7 Lincoln Street Newburyport, MA 01950

RAlanda



CITY OF NEWBURY FOR TO Office of the Maypenryport, MA Sean R. Reardon, Mayor 2023 JAN 25 P 1:45 60 Pleasant Street - P.O. Box 550 Newburyport, MA 01950 978-465-4413 phone Mayor@cityofnewburyport.com

To: President and Members of the City Council

From: Sean R. Reardon, Mayor

Date: January 9, 2023

Subject: Re-Appointment

I hereby re-appoint, subject to your approval, the following named individual as the Zoning Administrator for the City of Newburyport. This term will expire on December 31, 2024.

> Jennifer Blanchet 4 Island Lane Newbury, MA 01951

Ja Marsh

JENNIFER T. BLANCHET

4 ISLAND LN, NEWBURY, MA | 617-448-0794 | PLUMISLANDDOGS@AOL.COM

EXPERIENCE	
May 2017- Present	Zoning Administrator and Enforcement Officer, City of Newburyport Newburyport, MA
	Review proposed projects for zoning compliance and issue Building Permit Denials where applicable that indicate what planning review processes are required. Enforce the Zoning Ordinance and uphold decisions and permits that the Zoning Board of Appeals and the Planning Board issue. Respond to complaints, and issue penalties as they relate to violations to the Zoning Ordinance.
September 2016- April 2017	Site Coordinator and Construction Supervisor, NES Grows (Volunteer) Newbury, MA
	 Served as the technical advisor and job captain to the NES Grows Playground Committee and building committee prior to and during the construction of a brand new, custom designed, all volunteer constructed play yard at Newbury Elementary School. Assisted in securing individual and corporate volunteers from the surrounding communities to participate in this "community build" project.
November 2008- Present	Architectural Designer, Self Employed Newbury, MA
	 Provide design and drafting services for single family homes to both homeowners and contractors. Performed all aspects of design and production from site documentation and zoning analysis to design development and permit and construction documents while working in conjunction with consulting structural and civil engineers.
April 2005- November 2008	Project Architect/Manager, EGA Architects Newburyport, MA
	 While at EGA Architects, a full-service firm that specializes in the design or continuing care retirement communities, I was responsible for overseeing the development and coordination of design and construction documents for these large scale residential projects as well as meeting and reviewing projects with owners and municipalities.

EXPERIENCE CONT.

August 1996 to	Project Architect/Manager, Perry Dean Rogers and Partners Architects
April 2005	 At PDR P I was involved with all aspects of the design of multi-million dollar educational and civic projects. In addition to my early conceptual work and interviews to win projects, my role included overseeing and participating in the production of design documents for project types including theaters, libraries, arts buildings, dormitories, student centers and historic buildings as well as master planning for private schools and universities. My role also included construction administration through owner occupancy.
May 1992- August 1996	Landscape Gardener, TLC Landscape Design
August 1999	Summer position providing design, installation and maintenance of gardens to private homeowners and businesses in and around Woodstock NY

14

EDUCATION

August 1991-Bachelors of Architecture - Syracuse University, Syracuse, NYMay 1996Minor in Anthropology

PROFESSIONAL AWARDS

American School and University, Louis I Kahn Award -2007 Design Award for The "Kaleidoscope" Performing Arts Center at Ursinus College

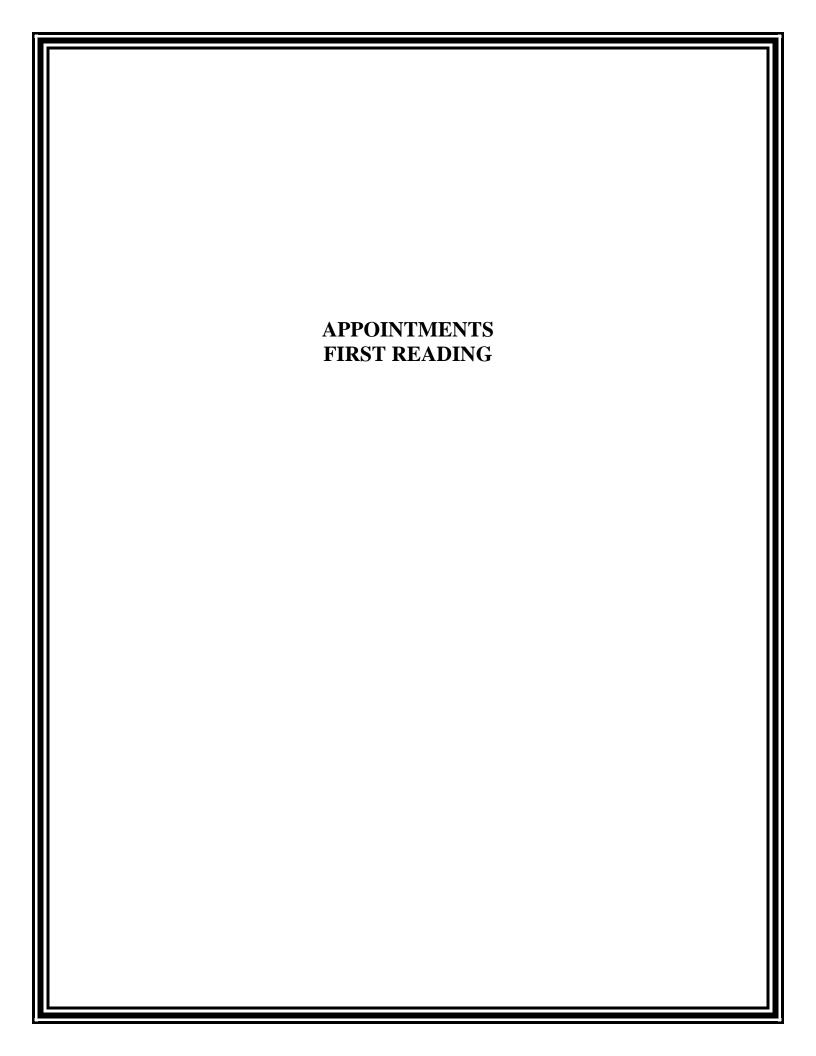
American School and University Educational Interiors Silver Citation-2006 Design Award for The "Kaleidoscope" Performing Arts Center at Ursinus College

Boston Society of Architects K-12 Educational Facilities Design Excellence -2002 Awarded for Design excellence for the Groton School Arts Center

SKILLS

AutoCAD, Microsoft office programs, Essential office functions, basic carpentry

END OF CONSENT AGENDA BEGINNING OF REGULAR AGENDA





CITY OF NEWBURYPORECEIVED OFFICE OF THE MAYOR NEWBURYPORT, MA SEAN R. REARDON, MAYOR 2023 JAN 24 A 9:30 60 Pleasant Street - P.O. Box 550

Newburyport, MA 01950 978-465-4413 phone mayor@cityofnewburyport.com

To: President and Members of the City Council

From: Sean R. Reardon, Mayor

Date: January 30, 2023

Subject: Re-Appointment

I hereby re-appoint, subject to your approval, the following named individual as a member of the Affordable Housing Trust. This term will expire on February 1, 2025.

Susanne Marzi Cameron 17 Hancock Street Newburyport, MA 01950

An R Reards



CITY OF NEWBURY POLERK'S OFFICE Office of the Mayone WBURYPORT, MA SEAN R. REARDON, MAYOR 2023 JAN 25 A 8:57

60 Pleasant Street - P.O. Box 550 Newburyport, MA 01950 978-465-4413 phone mayor@cityofnewburyport.com

To: President and Members of the City Council

From: Sean R. Reardon, Mayor

Date: January 30, 2023

Re: Temporary Appointment

I hereby temporarily appoint, subject to your approval, the following named individual as the Director of Public Services. This term will expire on April 16, 2023.

Jamie Tuccolo 19 Quentin Drive Londonderry, NH 03053

MEMORANDUM

To: President Shand and Members of the City Council

From: Mayor Sean Reardon

Re: Department of Public Services Director

Date: January 24, 2023

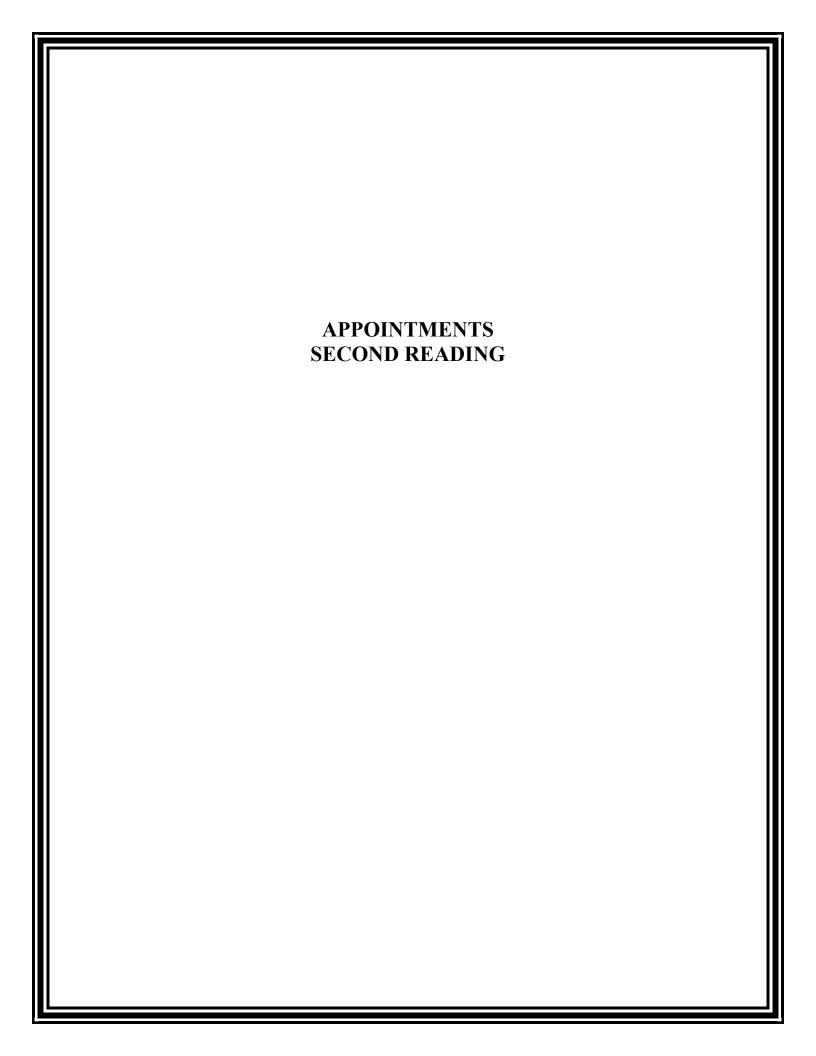
At your Meeting on January 30th, you will consider my appointment of Jamie Tuccolo as Director of the Department of Public Services, which will be effective as of January 16th, 2023 and will run through April 16, 2023. I am submitting this communication to give additional information on the reason for this temporary appointment and to request your support.

Following the retirement of Director Anthony Furnari, I appointed Mr. Tuccolo as Acting DPS Director on August 18th, 2022, pursuant to section 3.5 of the City Charter. The Charter allows for up to two extensions of this acting appointment, which I executed with their dates beginning November 16th and December 16th. Mr. Tuccolo's Acting Appointment expired based on the Charter on January 16th, 2023.

Contemporaneously, we have been engaged in a search for the next DPS Department. Because of the importance of this position, I retained the Collins Center, a municipal executive search firm, to lead this hiring process and assist in finding the best candidate for the position. The Collins Center began a thorough process of creating a candidate profile and reviewing the job description in preparation for an exhaustive search. The Collins Center advised that posting the position between mid-November and late-December would be a risk, as most candidates would be distracted by their work in putting together ice and snow preparations and by the holidays. They recommended releasing the position in early January, which is what we decided to do. The position is currently posted and the Mayor's resume screening committee will begin reviewing applications in the next two weeks to make recommendations on candidates to interview and consider for hiring. We aim to have this process completed by the end of February, at which point the selected candidate will be sent to the Council for approval.

This leaves us with a gap between the expiration of the acting appointment and the anticipated conclusion of the hiring process. We have consulted the City Solicitor on how to resolve this situation. The Legal opinion stated that the provisions of Section 3.5 are directory rather than mandatory, and that case law supports this reading. Under this interpretation, as long as the administration is attempting to fill the position and has a procedure in place, the acting appointment could be allowed to continue.

However, because the Charter does state limits on the term of an acting appointment in the case of a permanent vacancy, and because of the importance of this position, the Administration is instead recommending that Mr. Tuccolo be appointed as DPS Director on an interim basis, with his term concluding April 16, 2023. This would allow the Council to vote on this appointment and would build in time for the remainder of the full process to choose the next director. The Council may also wish to vote to suspend their rules and vote on the appointment on January 30th, so that the appointment can be considered sooner. We defer to the Council on this decision. In any case, we believe a temporary appointment is the best solution to this issue, and we look forward to receiving your support.



Second Reading Appointments

January 30, 2023

- APPT00361_01_09_2023 Alice Sheridan
- APPT00362_01_09_2023 Paul E. Bushey
- APPT00364_01_09_2023 Ben Harman
- APPT00365_01_09_2023 Shane Cough

11 Beck St.Council on Aging2/1/20281Dennett Dr.Council on Aging2/1/2028298 High St.Human Rights Comm.1/30/202670 High St.Human Rights Comm.1/30/2026

APPT00361_01_09_2023



CITY OF NEWBURYPORT Office of the Mayor Sean R. Reardon, Mayor

60 Pleasant Street - P.O. Box 550 Newburyport, MA 01950 978-465-4413 phone mayor@cityofnewburyport.com CITY CLERK'S CERICE NEWOUSY : T. MA

171 DEC 21 PH 12: 17

To: President and Members of the City Council

From: Sean R. Reardon, Mayor

Date: January 9, 2023

Subject: Appointment

I hereby appoint, subject to your approval the following named individual as a member of the Council on Aging. This term will expire on February 1, 2028.

Alice Sheridan 11 Beck Street Newburyport, MA 01950

Hello Christine,

I would like to submit my name for consideration for a position on the Newburyport Council on Aging Board.

I believe that my professional experience would make me a very strong candidate for this position. Throughout my career I have had the opportunity to work with seniors around housing placement and adjustment, as well as socialization and recreation opportunities and issues, health and wellness programs, and financial management programs. I have attached a copy of my resume for your review.

Thank you very much for your consideration.

Sincerely,

Alice Sheridan 11 Beck Street Newburyport, MA 01950

2010 to 2022

2010

Alice Sheridan

<u>Objective</u>	To obtain a position that best utilizes my extensive experience in Administration, Housing, Budgeting, Technology, Training and Planning.
Professional	

Experience

Gloucester Housing Authority - Assistant Executive Director

- Chief Operating Officer assisting the Executive Director with the administration of the agency and its 1350 Public Housing, Rental Assistance and Homeownership units
- Human Resource head with extensive hiring experience
- Development and implement of all policies
- Supervision of Housing Management, Finance, Maintenance, Inspection and Administrative employees
- Hearing, Fair Housing, harassment, employment and collective bargaining officer
- Chief author of \$100,000 ABL (A Better Life) Planning Grant and subsequent implementation grant

Topsfield Housing Authority - Executive Director2002 - 2010Extensive budget, financial, operations and management experience. Knowledge of
principals and practices of housing management, finances and maintenance systems.

Groveland Housing Authority - Executive Director

100

Other Relevant Experience

1993 - 2000 Topsfield School Committee - Chairperson 1995 - 2000

North Shore Education Consortium - Coordinator - Responsible for developing paid work experience for students, implementing appropriate work skills training and goals and scheduling work support and transportation.

Long Island Oil Company - Office Manager - General Ledger Accounting, AP and AR, Customer Service and Management Liaison.

Chemical Bank, New York, NY - Training Specialist- including curriculum development, interdepartmental coordination, and instruction.

Education Providence College, Providence, RI B.A. Rhode Island College, Providence, RI M.Ed.

<u>Professional Affiliations</u> - Public Housing and Section 8 Management Certifications MassNAHRO, Section 8 Administrators Association, NERCNAHRO

Additional Course Work - Computer Applications in Accounting, Financial and Managerial Accounting,

Excellent written and oral communication skills, analytical abilities and a very high competency with Microsoft Office Products.

APPT00362_01_09_2023



CITY OF NEWBURYPORT Office of the Mayor Sean R. Reardon, Mayor

60 Pleasant Street - P.O. Box 550 Newburyport, MA 01950 978-465-4413 phone mayor@cityofnewburyport.com NEW CLEAR STOPPICE

7.72 DEC 21 PM 12: 17

To: President and Members of the City Council

From: Sean R. Reardon, Mayor

Date: January 9, 2023

Subject: Appointment

I hereby appoint, subject to your approval the following named individual as a member of the Council on Aging. This term will expire on February 1, 2028.

Paul E. Bushey 1 Dennett Drive Newburyport, MA 01950 Mayor Reardon,

Paul Burke, the Executive Director of the Newburyport Council on Aging, (COA), has mentioned to me there is presently a board vacancy on the COA Board.

I am writing to you, to express my interest in serving on this Board. I have attached a resume. I retired from the Social Security Administration, (SSA), after 39 years, in 2016 in the position of Area Director for Maine, New Hampshire, Vermont and Northerner Massachusetts. I oversaw 24 SSA offices and 453 employees.

Wherever I have lived, I have felt it to be vitally important that I become involved in the community where I live. To this end, upon retirement I have been involved in numerous Newburyport community organizations, which I have listed in my attached resume.

I am serving this year as the General Chair for Yankee Homecoming, and have been the impetus in adding the YHC event at the senior/Community Center, "Know Your Community", which will be hosted by the COA next week.

I would be honored to be considered for this position on the Newburyport COA Board.

Thank you.

Paul E. Bushey 1 Dennett Drive, Newburyport, MA 860-428-8045 cell

Career Summary: A caring, dedicated professional with 39 years of experience with the Social Security Administration working in many areas, including, customer service, public relations, policy analysis and employee supervision, as a Boston Region executive.

Recent Work Experience Professional Qualification

Area Director, Social Security Administration 08/2014 – 01/2018 Retired

With 39 years with the Social Security Administration (SSA), I held progressively more responsible positions, working as Claims Representative, Operations Supervisor, Programs Analyst, Administrative Aide to the Area Director, District Manager and Area Director for Maine, New Hampshire, Vermont, and Northern Massachusetts. I was responsible for twenty-two Social Security offices, with three hundred and seventy-nine employees. I monitored workloads, labor management relations issues, human resources issues, including hiring, terminations, and performance and conduct issues and budgets.

Recent Professional Qualification and Volunteer Activities

2002-2005	Committee member establishing No Freeze Shelter in Willimantic, CT.		
2002- 2011	Board member Windham Regional United Way, Board Chair 2006-2008.		
2004-2006	Board member - Windham Chamber of Commerce, Chair of Leadership		
Developmen	t Committee.		
2003-2010	Board member – Community Prevention and Addiction Services, Board		
Chair 2005-2010. Merged with Community Health Resources in 2010.			
2010 - 2014	Board member Community Health Resources.		
2006 - 2014	Member of Steering Committee – Southeastern CT Ten-Year Plan to End		
Homelessness. Chair of the Employment and Income subcommittee.			
2011, 12, 13	Presenter - CT Coalition to End Homelessness Training		
2018 – present	Volunteer at, "Among Friends", serving a weekly meal at St. Paul's Episcopal Church in Newburyport, MA		
2018-2019	Chairperson on the Yankee Homecoming Parade in Newburyport, Ma, responsible for all aspects of the parade.		
2019- present	Board Member Link House, Treasurer 2021- present		
2020- present	Board Member Yankeehomecoming, General Chair 2022		

Honors and Awards

- 2011 Recipient of the 2011 Ewell T. Bartlett Humanity in Government Award, given each year, nationwide to one SSA employee, by the Commissioner of Social Security, to recognize an SSA employee who espouses humanitarian values and reflects those values in carrying out SSA programs. My citation reads," In recognition of sustained outreach and services to the homeless citizens of Connecticut through the SOAR program and volunteer efforts in the community".



CITY OF NEWBURYPORT Office of the Mayor Sean R. Reardon, Mayor JAN-3 FII 2: 14

60 Pleasant Street - P.O. Box 550 Newburyport, MA 01950 978-465-4413 phone mayor@cityofnewburyport.com

To: President and Members of the City Council

From: Sean R. Reardon, Mayor

Date: January 9, 2023

Subject: Appointment

I hereby appoint, subject to your approval, the following named individual as a member of the Human Rights Commission. This term will expire on January 30, 2026.

> Ben Harman 298 High Street Newburyport, MA 01950

Dear Ms. Jackson,

I moved to Newburyport in 2018 with my husband who was born and raised here. It had been 20 years since he graduated from Newburyport High School and 12 years since my first visit, but his parents who were a small business owner and local educator had always been an anchor for us to this wonderful city. Besides being one of the most beautiful places in the world, what really drove our decision to move here was the strong community and history of Newburyport. The past few years have been a whirlwind of global, political, and social developments giving me the itch to become more active locally, but working full time and volunteering on the board of a national nonprofit felt like all I could take on at the time. I recently saw the Mayor's request for applicants to fill city boards and commissions though, and I could not sit by and not raise my hand to do my part for our wonderful community as a member of the Human Rights Commission.

As you will see from the attached resume, my work experience has largely been in the Boston-area tech sector where I have grown my career over the past 16+ years. I remember my first month at Yahoo! when they celebrated National Coming Out Day and how it made me comfortable being my authentic self at work. Over the years I have had other positive experiences and some not-so-positive, too related to being a member of the LGBTQ+ community in the evolving world of corporate America - and as a citizen of our country - as rights and norms have changed. As a senior leader at CarGurus in 2017, I started not only the first LGBTQ+ employee group, but the beginning of an entire slate of employee resource groups for the 1000+ company. It was my turn to pay it forward and provide the representation and space for others like my own experience 10 years earlier. In my current role at Owl Labs I have broader responsibility for our diversity, equity and inclusion initiatives among overall culture and employee engagement duties. Respect for and celebration of diversity is something I care deeply about.

Serving as a volunteer, donor, director, and now treasurer of the board of Point Foundation has been among the most rewarding and educational experiences of my adult life. At Point Foundation we are enabling a new generation of LGBTQ+ leaders to get an education, gain a vast network of mentors and alums, and feel the acceptance of a community many of them would otherwise have been denied. Our diverse scholars (84% are people of color) and their stories inspire me to challenge my own biases, be more inclusive, and more vigorously advocate for the rights of all.

Although I know I have a lot to learn about the operations of the Human Rights Commission in Newburyport, I believe I bring valuable experience as an active LGBTQ+ member of our community as well as executive leadership and advocacy skills that would prove useful to the Mayor's administration. As a member of the commission, I will work hard to support the sense of welcome and respect for residents and visitors to our city. Thank you very much for your consideration.

Best regards,

Ben Harman (he/him) 298 High Street Newburyport, MA (617) 959-4612

BEN HARMAN Chief of Staff at Owl Labs

\$ (617) 959-4612

https://www.linkedin.com/in/bjharman/

bjharman@gmail.com Greater Boston Area

SUMMARY

Seasoned technology startup leader. Adaptable and collaborative. Focused on growing businesses and developing people. Committed to creating a diverse and welcoming work environment.

EXPERIENCE

Chief of Staff

Owl Labs

🛍 08/2019 - Ongoing 🛛 🖗 Boston, MA Innovative video conferencing technology

- Partner with CEO to oversee day-to-day operations of executive team and lead the execution of strategic initiatives for growing \$100M startup
- Integrate enterprise business operations platforms including Salesforce and Netsuite as well as business intelligence tools Domo and Looker
- Influence and champion strong company culture managing logistics of hybrid workforce, curating employee programming and communication, and serving as eyes and ears for the overall health of the organization
- Advocate for customers by directing the customer care and technical support teams and create critical feedback loop to internal product and technology leaders to inform roadmap

Senior Director, Ad Solutions & Operations

CarGurus

🛍 11/2014 - 07/2019 🛛 🕈 Cambridge, MA Global automotive marketplace

- Implemented advertising and data technology infrastructure and business strategy to support new \$75MM business
- Built Ad Solutions & Operations department of 17 employees including individual contributors and managers
- Cultivated strong cross-functional relationships with engineering, product, marketing, sales, and business development to deliver results
- Established culture of autonomy, collaboration, accountability, and empowerment

Director, Business Operations

Millennial Media

🛍 03/2013 - 11/2014 🛛 🕈 Boston, MA

- Mobile advertising & marketing technology
- Initiated business transformation through process analysis, workflow improvement, and program management
- Served as internal consultant for key stakeholders and senior leadership enabling successful client experiences and enhanced productivity for internal teams
- Key contributor in M&A transaction resulting in sale of earlier stage startup (Jumptap) and subsequent integration into public company



VOLUNTEERING

Board of Directors, Treasurer

Point Foundation

1/2018 - Ongoing

Point Foundation is the nation's largest scholarship-granting organization for LGBTQ students of merit.

- Chair of the Finance and Technology committee (2019 - present)
- During my tenure we have expanded community college program, introduced BIPOC scholarships, and grown the overall number of scholarship recipients from ~100 in 2017 to over 500 in 2022

Boston LGBTQ Professionals Meetup

1 2018 - Ongoing

Established networking group for LGBTQ professionals in the Boston area with over 750 members

PUBLICATIONS

Strategies to Boost Employee Engagement in the Hybrid Workplace

Bravely Webinar

Sara Aharon

m 04/2022 https://learn.workbravely.com/employee-engagement-hy brid

Now more than ever, infusing a culture of connection is key to retention, growth, and productivity.

Owl Labs Announces Hiring Of Key Executives

Insider

PR Newswire

🛍 11/2019 🛛 e https://www.insider.com/ These new additions to the company and leadership team occur as Owl Labs further invests in its company as part of its recent Series B funding round.

Co-Founder

EXPERIENCE

Senior Manager, Advertising Account Management & Operations

Yahoo!

🛍 10/2007 - 06/2012 🛛 9 Boston, MA

Digital media & technology

- Directed team of account managers planning and executing major advertiser and agency ad campaigns on the Yahoo! network
- Contributed deep domain expertise and client knowledge to exceed revenue goals every quarter
- Built high touch campaign management team supporting \$400MM in annual sales, scaling to complete 10,000 service requests annually
- Awarded company recognition for global platform development and integration

Operations Manager

Luggage Forward

🛗 01/2006 - 10/2007 🛛 🕈 Boston, MA

Personal & professional travel services

- Supervised customer operations during critical early growth period for innovative service and logistics startup
- Wrote the operations and customer success playbook and trained team of associates

*

EDUCATION

Bachelor of Music, Vocal Performance

Boston University

PUBLICATIONS

CarGurus Shifts Its Programmatic Business Into High Gear

AdExchanger

Sarah Sluis

08/2016 Arttps://adexchanger.com/
 "Between March and April... revenue increased
 160%. CPMs for private marketplaces averaged
 20% higher after making the adjustments."

STRENGTHS

Hidden talent:

Event planning! Whether it's an executive dinner for 4 or an off-site for 100, delivering meaningful experiences.

Hiddent talent:

Oversaw Covid-19 response for global company of over 150 including research and creation of health policies and procedures as well as communication, implementation, and revision over time.



CITY OF NEWBURYPORT OFFICE OF THE MAYOR SEAN R. REARDON, MAYOR 3 JAN - 3 PH 2: 14

60 Pleasant Street - P.O. Box 550 Newburyport, MA 01950 978-465-4413 phone mayor@cityofnewburyport.com

To: President and Members of the City Council

From: Sean R. Reardon, Mayor

Date: January 9, 2023

Subject: Appointment

I hereby appoint, subject to your approval, the following named individual as a member of the Human Rights Commission. This term will expire on January 30, 2026.

Shane Cough 70 High Street Newburyport, MA 01950

January 3, 2023

Shane Cough 70 High Street Newburyport, MA 01950

Mayor Sean Reardon The Office of the Mayor Newburyport, MA

Dear Mr. Mayor:

I am writing to ask for your consideration of me as a candidate for the human rights commission. I have been a citizen of Newburyport for close to ten years, now, and I'd like to get involved in the community in a deeper way. I see the HRC as a place where I think I can contribute.

Social and economic justice is a passion of mine. I believe strongly that all people are created equally and should enjoy equal protections — not only under the law, but within our culture and society universally. I also believe that we should all actively stand up for individuals and fight for those rights wherever and whenever necessary. I have seen a lot of positive change in some areas during my lifetime and others where much work is to be done, and I do fear there is a risk of regression in societal attitudes and even laws. I would like to get involved to help ensure our community strives to proactively lead in areas of diversity, equity, and inclusion, and that when incidents of hate, discrimination, and exclusion do occur, that we are responding forcefully and appropriately.

When I was 11 years old, a 23-year-old man who identified as gay was thrown off of a bridge to his death by three teenage boys in my hometown of Bangor, Maine. The event and some of the public responses were horrifying. That was 1984. Fast forward to when I was 31 and living in Cambridge, MA, I witnessed the first ever marriage license issued to a gay couple at the stroke of midnight on May 17, 2004. And just last year, I watched my fellow Newburyport citizens rally to support the teen LGBTQ+ community by reversing a decision to cancel a dance with a theme of inclusion. That feels like progress that I'd like to see continue. At the same time, I have friends here in our city that are people of color who share stories that convey that they do not feel welcome or safe at times here, in Newburyport. Nationally and locally, incidents of hate crimes against Asian-Americans and the Jewish community are on the rise.

I am not an academic, lawyer, social worker, or community activist by trade, but I believe my years leading with empathy and problem solving as a senior leader in a business setting, my knowledge of the subject matter from educating myself, and experience as a father of two young daughters will add value to the committee. I want to get involved beyond what I've been doing---attending Black Lives Matter protests and donating to charities and politicians doing the hard work. I'd like to contribute in a bigger way, and that's my motivation for seeking the post. I appreciate your consideration.

Yours truly,

Shane Cough

Shane Cough

70 High Street Newburyport, MA 01950 617-275-3675 smcough@gmail.com

PROFILE

Strategic Senior Sales Executive and Go-To-Market Leader Software, Software-as-a-Service, Professional Services

Experienced senior executive with proven ability to drive business growth and positive strategic outcomes. Senior Manager who has designed, planned and implemented go-to-market strategies, built successful teams and driven territory and product launches in the US and abroad in high growth arenas. Experience in software, SaaS, hardware, and professional services sales across B2C and B2B enterprise and mid-market clients. Launched a European office, managed two successful M&A processes and on-boarding post-merger. Experience in building channel and OEM partnerships with technology providers, systems integrators and marketing agencies to scale growth and in managing product marketing and evangelizing new technology.

PROFESSIONAL EXPERIENCE

Genesys/Pointillist, Inc Boston, MA

Customer Experience Software-as-a-Service

- VP Global Sales, CX Transformation
 - Report to EVP Global Sales (reported to CEO at Pointillist)
 - Led Go To Market Strategy and Customer Relationships
 - Drove Revenue through New Sales and Growth that Resulting in 28x Strategic Exit via Acquisition by Genesys in 2021
 - Grew the Company along with Co-founders CEO and CTO from \$200,000 to \$10mm in four years
 - Built Sales Team and Co-Owned Account Based Marketing Strategy with VP Marketing

QuickPivot

Boston, MA

SaaS Cross-Channel Campaign Management Platform

- VP Sales
 - Reported to Chief Revenue Officer
 - Consistently Exceeded Quota
 - o Responsible for Direct Sales and Channel Partner Recruitment
 - o Building OEM revenue stream with global CRM technology provider
 - o Clients include B2C and B2B mid-tier to enterprise
 - Partners include marketing agencies and service providers

Jan 2018-Dec 2021

July 2016-present

OpFocus, Inc. ,

Business Operations Consulting Firm (Salesforce.com Consulting Partner)

- SVP Sales & Marketing
 - o Reported to CEO
 - o Built Sales Team and Go-To-Market Strategy for growing services business
 - Sold Salesforce, Marketo and Pardot Systems Integration and Consulting Services
 - Grew Business from \$1.8 million (2013) to \$4.5 million (2015)
 - Typical Clients: COO, CRO, CMO, SVP Sales Operations at Mid-Market Organizations across High Tech, Manufacturing, FINS, HLS, Media and Pro Services Verticals
 - o Re-launched Website, Transformed Business Model to Drive Margin Growth
 - Created Sales Process & Methodology, and Pricing & Packaging Models from the Ground up
 - o Managed Relationship with Strategic Partners: Salesforce, Marketo

Zeta Global

Customer Lifecycle Marketing

Zeta CRM

VP Product Marketing and Strategic Alliances (Boston)

- Reported to SVP Sales & Marketing
- o Responsible for Global Channel Partner Development
- Key Member of Organization Integration Team Post-Merger
- o Managed Product Marketing for CCCM SaaS Platform & Professional Services
- o Subject Matter Expert Seller for Cross-Channel Campaign Management Solutions

ClickSquared (acquired by Zeta January 2014)

VP Global Sales & Business Development (London & Boston)

- Reported to CEO
- With CEO and CFO Led Company Strategy and Supported M&A effort to successful result for VC investors
- o Designed and Implemented Channel Partner Program
- o Grew Channel from 0 to 20% of revenues in 3 years

Director of Sales & Marketing, EMEA (London, UK)

- Reported to CEO
- Led EMEA Go To Market Strategy

1

- o Launched London office and Built UK Sales & Marketing Team
- o Grew UK Business from \$800,000 to \$5 million in 3 Years

1996-2008

 A number of successful tech Sales Roles in SaaS, Software, Hardware mostly in the marketing tech space. Started as individual contributor at ClickSquared in 2005 before moving to London and into management (Xchange, Inc., Lanier, MarketSoft, Apple, others.

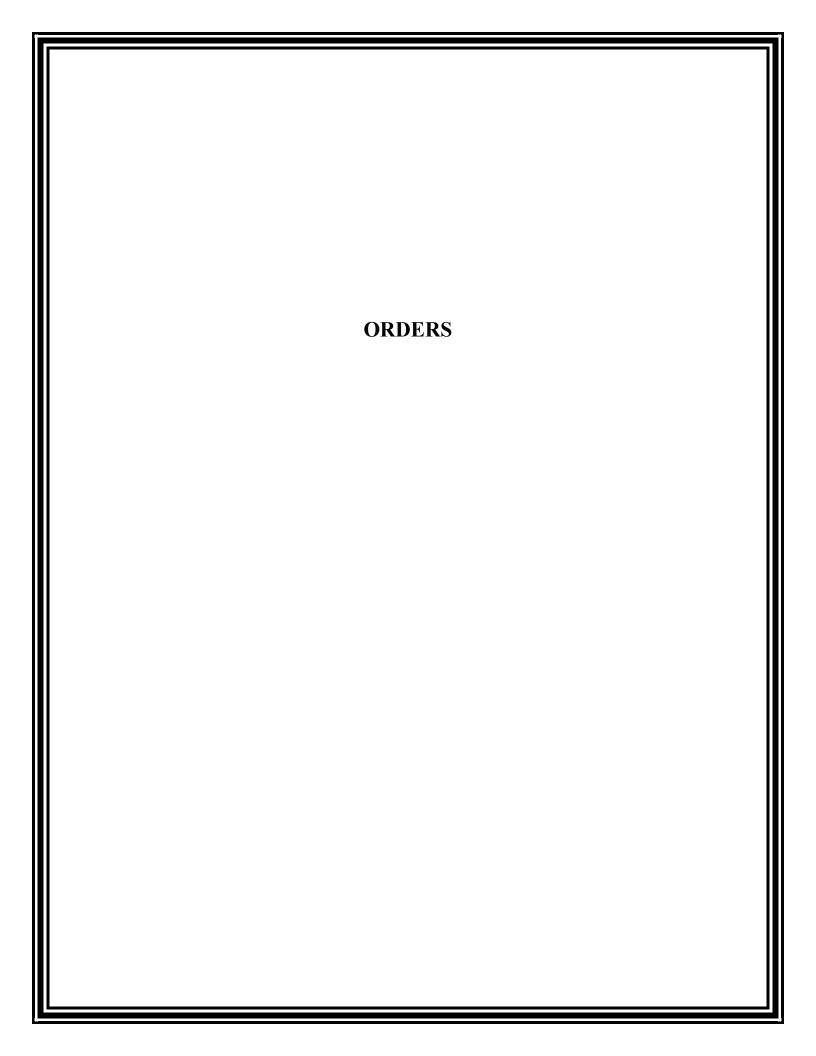
2014 - 2016

2014

Boston, MA & London, UK

2013-2014

2009-2013



ORDR00413_01_30_2023

CITY OF NEWBURYPORT



IN CITY COUNCIL

ORDERED:

January 30, 2023

Amended as follows, with deletions *double-stricken and italicized*, and additions *double-underlined and italicized*:

THAT pursuant to the CITY OF NEWBURYPORT Code of Ordinances Section 13-180.1.(f)(1) and Section 13-166 the CITY COUNCIL of the CITY OF NEWBURYPORT hereby amends and approves the following schedule of parking fees and fines in the paid parking lots:

Inn Daily Pass for the Garage

<u>\$16.00/per day</u>

Inn is defined as a hotel/inn including conference and meeting facilities and bed and breakfast. Visitors may park overnight up to a maximum of seven (7) days.

Councillor James J. McCauley

CITY OF NEWBURYPORT



IN CITY COUNCIL

ORDERED:

January 30, 2023

THAT, The CITY COUNCIL of the City of Newburyport accepts with gratitude a gift from the Rotary Club of Newburyport, in the amount of \$6,182 to be used for the purpose of creating an accessible playground at the Bartlet Mall. Said funds are accepted in accordance with M.G.L. Chapter 44, Section 53A.

Councillor Sharif I. Zeid

CITY OF NEWBURYPORT



IN CITY COUNCIL

ORDERED:

January 30, 2023

AN ORDER UPDATING THE AD HOC COMMITTEE ON ADAPTIVE REUSE OF BROWN SCHOOL PROPERTY

WHEREAS, on April 11, 2022, the City Council approved Order 324 (ORDR00324_03_14_2022), as amended, establishing the Ad Hoc Committee on Adaptive Reuse of the Brown School Property; and

WHEREAS, on September 27, 2022 the City Council approved Communication 432 (COMM00432_09_12_2022) amending the Membership and Proposed Timeline referenced in the prior Order 324, including anticipated completion of the Committee's work by February 2023; and

WHEREAS, the Ad Hoc Committee on Adaptive Reuse of the Brown School Property has met several times since its establishment, and on December 15, 2022 a vote was taken to pursue issuance of a Request for Expressions of Interest (*or RFI*) in relation to future uses of the former Brown School property in advance of any formal vote of surplus property designation, authorization for disposition and issuance of a Request for Proposals (RFP);

NOW, THEREFORE, the City Council hereby updates the Membership and Proposed Timeline for said Ad Hoc Committee as follows:

Members:

- 1. Councillor Bruce Vogel, Councilor at Large (Ad Hoc Chair)
- 2. Councillor Jennie Donahue, Ward 2 City Councilor
- 3. Councillor Connie Preston, At-Large, Member of Planning and Development Committee
- 4. Councillor Byron Lane, Ward 6 City Councilor
- 5. Councillor Sharif Zeid, Ward 1 City Councilor

Ex Officio (Non-Voting) Members:

- 1. Sean Reardon, Mayor
- 2. Andrew Port, Director of Planning & Development
- 3. Designee of Mayor Reardon
- 4. Madeline Nash, Co-Chair, Newburyport Affordable Housing Trust
- 5. Karen Wiener, Member of Newburyport Affordable Housing Trust
- 6. Christine Madore, Facilitator, Massachusetts Housing Partnership

Proposed Timeline (prospective):

January/February 2023	Committee meetings to discuss and finalize draft Request for Expressions Interest (RFI) terms and provisions (<i>general outline</i>) with allowance for public comment in relation thereto.
	The Committee shall determine the general format and terms for the RFI. This is not a formal procurement/disposition process intended to satisfy the statutory/regulatory prerequisites for legal disposition (<i>sale/lease</i>) of municipal property, and the results and any responses thereto shall not be binding on the City. The purpose of this RFI is to gather sufficient information from the private and non-profit sector as to what adaptive reuse options may be feasible and of interest in the current market.
March/April 2023	Office of Planning & Development to issue final and complete RFI in proper form based on the Committee's outline for said RFI.
	Upon formal issuance of said RFI the Council's Ad Hoc Committee on Adaptive Reuse of the Brown School shall be dissolved forthwith and without a further vote of the Council.
	Director of Planning & Development to provide compiled RFI responses ("Expressions of Interest") and a summary thereof to the Mayor and Council for further consideration as to the appropriate scope of any adaptive reuse program applicable to the Brown School Property, terms and provisions for surplus property designation, authorization for disposition and/or the issuance of a formal Request for Proposals (RFP) in relation thereto.

Councillor Heather L. Shand

Councillor Bruce L. Vogel

Newburyport Multi-Hazard Mitigation Plan November 2022

Prepared by:





CITY OF NEWBURYPORT



IN CITY COUNCIL

ORDERED:

January 30, 2023

A RESOLUTION ADOPTING THE NEWBURYPORT MULTI-HAZARD MITIGATION PLAN (MONTH) 2022

WHEREAS, the **City of Newburyport** established a local planning team to work with and assist the Merrimack Valley Planning Commission in the preparation of the **Newburyport Multi Hazard Mitigation Plan Update 2022** (hereinafter, "Newburyport HMP"); and

WHEREAS, the Newburyport HMP identifies potential future activities and projects aimed at mitigating potential adverse impacts from floods, winter storms, and other natural hazards in the City of Newburyport; and

WHEREAS, duly noticed workshops and public meetings were held by the City of Newburyport on August 18, 2021 (workshop) and on May 18, 2022 and [Month/Date], 2023 (Listening Sessions) as part of the process of updating the Hazard Mitigation Plan; and

WHEREAS, the City of Newburyport, acting through its various municipal departments, boards, and commissions is committed to implementing these potential mitigation activities and projects as future City funding and personnel resources permit; and

WHEREAS, adoption of this Hazard Mitigation Plan makes the City of Newburyport eligible for funding to alleviate the impacts of future hazards.

NOW, THEREFORE BE IT RESOLVED by the Newburyport City Council adopts the *Newburyport Multi-Hazard Mitigation Plan 2022* in accordance with M.G.L. 40 §4 or the charter and ordinances of the City of Newburyport.

Councillor Edward C. Cameron Jr.

Councillor Mark R. Wright

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Executive Summary

Local hazard mitigation planning is the process of organizing community resources, identifying, and assessing hazard risks, and determining how to best minimize or manage those risks. This process results in a Multi-Hazard Mitigation Plan (HMP) that identifies specific mitigation actions, each designed to achieve both short-term planning objectives and a long-term community vision. The Federal Disaster Mitigation Act of 2000 requires all municipalities to adopt a local HMP and update their plan every five years to be eligible for FEMA funding for hazard mitigation grants. Newburyport was previously included in the regional Merrimack Valley Multi-Hazard Mitigation Plan Update (2016), completed by the Merrimack Valley Planning Commission (MVPC). This plan expired in May of 2021.

The Massachusetts Executive Office of Energy and Environmental Affairs' Municipal Vulnerability Preparedness (MVP) grant program helps communities assess local vulnerabilities to climate change and to develop appropriate action-oriented response strategies. The program provides technical support, guidance, and financial incentives for cities and towns to undertake community vulnerability self-assessments and prioritize projects and actions that can make a community more resilient and better prepared to mitigate long-term risks and adapt to climate change impacts. This planning process is very similar to that which is required to complete a local hazard mitigation plan. Newburyport became a designated MVP community in 2018.

In October of 2020, the city released the Newburyport Climate Resiliency Plan. This plan focuses on Newburyport's short and long-term vulnerability to climate change. While it incorporates some of the risks identified in the Hazard Mitigation plan, it doesn't consider non-climate related risks such as terrorism and earthquake. This plan also does not replace current emergency response and evacuation plans, although information developed in this plan may contribute to both of those plans. This plan does consider and combine elements of previous risk and vulnerability studies and examines in greater detail the impacts of climate hazards on areas within the city to chart a course to meet Newburyport's climate related challenges.

By incorporating the city's MVP planning outcomes and the in-depth findings and adaptation strategies identified in the Climate Resiliency Plan, Newburyport has accomplished a foundation of planning to update their Multi-Hazard Mitigation Plan. By working with MVPC, the authors of the 2016 Regional HMP update, Newburyport will have the latest local and regional data to facilitate their HMP update process. MVPC with work with the city's Resiliency Committee to conduct an inclusive HMP update that will be a more comprehensive tool for addressing risk to human life and property associated with hazards that will be exacerbated by climate change.

SECTION 1. INTRODUCTION

This section provides a general introduction to the updated **Newburyport Multi-Hazard Mitigation Plan** (hereinafter "Newburyport HMP"). It consists of the following four subsections:

- Disaster Mitigation Act
- Background
- Plan Purpose
- Geographic Scope

1.1 Disaster Mitigation Act



Congress enacted the Disaster Mitigation Act of 2000 (DMA 2000) on October 10, 2000. Also known as the Stafford Act Amendments, the bill was signed into law by President Clinton on October 30, 2000, creating Public Law 106-390. The law established a national program for pre-disaster mitigation and streamlined the federal administration of disaster relief. Specific rules on the implementation of DMA 2000 were published in the Federal Register in February 2002 and required that all communities have an approved Multiple Hazards Mitigation Plan in place to qualify for future federal disaster mitigation grants following a Presidential disaster declaration.

According to federal regulations, every five years regional and local jurisdictions must review and revise their plan to reflect changes in development, progress in mitigation efforts, and priority changes. The updated plan must be resubmitted to Massachusetts Emergency Management Agency (MEMA) and the Federal Emergency Management Agency (FEMA) for review and approval to continue to be eligible for mitigation project grant funding. Plan updates must demonstrate that progress has been made in the last five years through a comprehensive review of the previous plan.

The regional and local plans emphasize measures that can be taken to reduce or prevent future disaster damages caused by natural hazards. Mitigation, in the context of natural hazard planning, refers to any action that permanently reduces or eliminates long-term risks to human life and property. In 2006, FEMA performed a cost-benefit analysis based on a sampling of hazard mitigation grants and determined that every dollar spent on mitigation saved society an average of six dollars.¹

A variety of mitigation actions are available to reduce the risk of losses from natural hazards. These activities, which can be implemented at the local and state levels, include

¹ Multi-Hazard Mitigation Council (2019). Natural Hazard *Mitigation Saves: 2019 Report.*

hazard mitigation planning, the adoption and enforcement of development codes and standards, the use of control structures such as floodwalls and culverts, and the protection of wetlands, floodplains, and open space. Many of the strategies identified in hazard mitigation planning are implemented through land use planning tools and development regulations that can prevent or limit development in hazard-prone areas. Where development has already occurred in hazard-prone areas, buildings can be retrofitted or modified to increase the chances of surviving a known hazard. Strict enforcement of the state building code is critically important to effectively minimize natural hazard losses.

In addition to addressing natural hazard mitigation, this updated hazard mitigation plan includes an overview of non-natural hazards and assesses the interrelationship of climate change and hazard mitigation.

1.2 Municipal Vulnerability Preparedness

Governor Baker in September 2016 issued Executive Order 569, directing the Secretary of the Energy and Environmental Affairs and the Secretary of Public Safety to coordinate efforts across the Commonwealth to strengthen the resilience of communities, prepare for the impacts of climate change and mitigate damage from extreme weather events. The State agencies were charged with establishing a framework that each city and town could use to assess local vulnerabilities to climate change and to develop appropriate action-oriented response strategies.

The Commonwealth's agency response is the Municipal Vulnerability Preparedness Grant Program (MVP) which provides support to Massachusetts communities to plan for resilience and implement key adaptation actions. The MVP framework, developed by The Nature Conservancy, employs a workshop-based model designed to help local stakeholders in:

- Characterizing climate-related and extreme weather hazards of highest concern to the community;
- Understanding the science of climate change and adaptation. EOEEA has established a website <u>www.resilientma.org</u> as a data clearinghouse for science and state-specific geographic data on climate change;
- Identifying existing and future vulnerabilities and asset strengths in areas of infrastructure and critical facilities, socio-economic characteristics, and environmental resources;
- Developing and prioritizing actions for community resilience based on identified opportunities for risk reduction and resilience building; and
- Implementing key actions through community partnerships.

With the completion of the resilience-building planning process, a city or town can become a formally designated MVP community, eligible for MVP action grants to undertake technical plans as well as design and construct priority resilience projects.

In 2018, the Commonwealth of Massachusetts adopted the **State Hazard Mitigation and Climate Adaptation Plan (SHMCAP)**. The plan was the first of its kind to comprehensively integrate climate change impacts and adaptation strategies with hazard mitigation planning

to comply with current federal requirements for state hazard mitigation plans under the Stafford Act. Following the State's example, cities and towns are eligible for additional funding to combine the MVP Planning process with hazard mitigation planning. Newburyport became an MVP designated community in 2018 and completed an all-inclusive Climate Resiliency Plan in 2020. The city will utilize these comprehensive planning processes and outcomes to integrate, as the state has done, climate change impacts and adaptation strategies into their HMP update.

1.3 Background

Natural hazards, such as floods, hurricanes, and severe winter storms, are a part of the world around us. Their occurrence is natural and inevitable, and our capacity to control their frequency, intensity, or duration is limited. Also, climate change is altering the frequency and intensity of these events requiring municipalities to examine climate projections as part of their planning. The Merrimack Valley region is vulnerable to a wide array of natural hazards, including *floods*, *hurricanes*, *nor'easters*, *snow and ice storms*, *drought*, *wildfires*, and even *tornadoes* and *earthquakes*. These hazards threaten the safety of our residents and have the potential to damage or destroy public and private property, disrupt the local economy, and diminish the overall quality of life of those who live, work, and play in the region.



While we cannot eliminate natural hazards, there is much we can do to lessen their impacts on communities and citizens. By reducing a hazard's impact, we can decrease the likelihood that such an event will result in a disaster. The concept and practice of reducing risks to people and property from known hazards is generally referred to as **hazard mitigation**. Also, by incorporating the best available scientific information on climate change, communities are better able to develop adaptation strategies to increase resilience.

Local hazard mitigation planning is the process of organizing community resources, identifying and assessing hazard risks, and determining how to best minimize or manage those risks. This process results in a Multi-Hazard Mitigation Plan that identifies specific mitigation actions, each designed to achieve both short-term planning objectives and a long-term community vision. To ensure the functionality of each action, responsibility is assigned to a specific individual, department, or board, along with a timeframe for its implementation. Plan maintenance procedures are established for the routine monitoring of implementation progress, as well as the evaluation and enhancement of the Mitigation Plan itself. These Plan maintenance procedures are intended to ensure that the Plan remains a current, dynamic, and effective planning document over time.

Mitigation planning has the potential to produce long-term, recurring benefits by breaking the repetitive cycle of disaster loss. A core assumption of hazard mitigation is that predisaster investments will significantly reduce the demands for post-disaster assistance by lessening the need for emergency response, repair, recovery, and reconstruction. Furthermore, mitigation practices will enable residents and businesses to re-establish themselves in the wake of a disaster, getting the community and its economy back on track sooner and with less disruption to lives and vital services.

The benefits of mitigation planning go beyond solely reducing hazard vulnerability. Measures such as the acquisition or regulation of land in known hazard areas can achieve multiple community goals, such as preserving open space, maintaining environmental health, and enhancing recreational opportunities. Thus, it is vitally important that any local mitigation planning process be properly integrated with other concurrent local planning efforts, such as the city's Master Plan or Open Space and Recreation Plan. Similarly, any proposed mitigation strategies and actions should take into account other community goals and initiatives that could complement (or possibly hinder) their future implementation.

1.4 Plan Purpose

The purpose of the Newburyport HMP is to identify and characterize hazards associated with natural disasters and climate change; determine specific locations, populations, and facilities that are vulnerable to these hazards; and formulate mitigation goals, strategies, and actions to reduce the risks and impacts associated with these hazards. By developing and implementing a hazard mitigation and vulnerability preparedness plan *before* disaster strikes, Newburyport will be better able to prevent or minimize loss of life and property. Anticipated Plan benefits include:

- A community that is a safer place to live, work, and visit;
- Speedier physical and economic recovery and redevelopment following disaster events;
- Compliance with state and federal regulatory requirements for natural hazard mitigation plans; and
- Qualification for local grant funding in the pre-disaster and post-disaster environments.

FEMA, within the Department of Homeland Security, is responsible for leading the country's efforts to prepare for, prevent, respond to, and recover from disasters. FEMA has made hazard mitigation a primary goal in its efforts to reduce the long-term effects of natural hazards. FEMA provides guidance to state, regional and local governments in developing their hazard mitigation plans, reviews and approves the plans, and administers several hazard mitigation grant programs to fund mitigation activities.

Some state and federal grant programs mandate that local governments develop and maintain up-to-date natural hazard mitigation plans. The Federal Disaster Mitigation Act of 2000 requires all communities to have such plans in place to be eligible for future

federal post-disaster mitigation funds under the Federal Emergency Management Agency's (FEMA) Hazard Mitigation Grant Program (HMGP). This Hazard Mitigation Plan is intended to assist the communities in complying with this requirement.

The mitigation planning process is also directed at ensuring that local mitigation strategies and implementation actions: 1) address the *priority* mitigation needs identified by each community, and 2) are properly coordinated among the region's communities to maximize limited resources, minimize inter-municipal conflicts, and avoid duplication of effort.

As stated previously, to remain current, hazard mitigation plans must be updated and resubmitted to FEMA for approval every five years. Plan updates must demonstrate that progress has been made in fulfilling the commitments made in the previous plan. This requires a review and update of each section of the plan and a discussion of the progress made over the past five-year period.

Newburyport was previously part of the regional Merrimack Valley Multi-Hazard Mitigation Plan which was approved in 2016. While the Merrimack Valley region has applied for Building Resilient Infrastructure Communities (BRIC) grant funding, the City of Newburyport needs an updated plan on a faster timeline. Having recently completed the Newburyport Climate Resiliency Plan (<u>https://www.cityofnewburyport.com/recyclingenergy-sustainability/resiliency-sustainability/links/newburyport-climate-resiliency-plan</u>), the city is well prepared to incorporate this extensive work into the HMP update. The result is an HMP that describes occurrences of hazards included in the previous plan and assesses Newburyport's capacity to adapt to changing hazards and climate conditions in the future. The plan has also been updated to include changes in development patterns and changes in local and regional priorities. The goals contained in the MVP Summary of Findings and the Climate Resiliency Plan have been reviewed and reaffirmed and reflect new information, priorities, and a changing climate.

1.5 Planning Process and Vision Statement

Following extensive planning, education, and outreach to develop the Newburyport Climate Resiliency Plan, Newburyport seeks to use this information to update its Hazard Mitigation Plan. Working with Newburyport's Community Resiliency Committee, the city will:

- 1) update local and regional climate-related hazards;
- update the city's strengths and vulnerabilities regarding each of these hazards, now and in the future;
- 3) update the city's prioritized action plan to improve the city's resilience to and preparedness for these hazards.

In developing this action plan, the following factors should be considered:

• Maintaining and improving quality of life in Newburyport;

- Maintaining fiscal balance and stability despite large and unforeseeable municipal expenses during and after events;
- Maintaining communication pathways, and information technology systems, during events (including power outages);
- Maintaining water quality and protecting our natural resources through changing conditions;
- Maintaining and replacing aging infrastructure to withstand current and future hazards;
- Protecting transportation systems against hazards, including public transportation reliability;
- Avoiding and mitigating damage to private and public property during events;
- Providing emergency shelter options to vulnerable populations during events;
- Avoiding poor air quality as temperatures rise, especially during heat waves;
- Accommodating increasing energy use and the resulting strain on the electrical grid during heat waves; and
- Managing insects, pests, wildlife, and invasive plant species with changes in precipitation patterns and increasing temperatures.

SECTION 2. PLANNING PROCESS & PUBLIC PARTICIPATION

This section describes the process undertaken to update the plan by the City of Newburyport and its Community Resiliency Committee and other stakeholders to develop the **Newburyport HMP update**.

2.1 Planning Process Summary

Prior to undertaking the HMP Update, the city completed four risk assessment studies, with the most recent going beyond just assessing storm and flood impacts, but also considering other impacts from climate change on Newburyport²:

<u>Great Marsh Coastal Adaptation Plan³</u> – National Wildlife Federation (NWF), Final Report issued December 2017

Following the devastation inflicted by Hurricane Sandy, the Federal Government made funds available to improve the resilience of coastal communities. In 2014, NWF was awarded \$2.9 million dollars for the project titled "Community Risk Reduction through Comprehensive Coastal Resiliency Enhancement for the Great Marsh." This project offered a holistic and integrated approach to reducing the growing vulnerability of communities within the Great Marsh to coastal hazards by strengthening the resiliency of

44 CFR Requirement

Part 201.6(c)(1): The plan shall include documentation of the planning process used to develop the plan, including how it was prepared, who was involved in the process, and how the public was involved.

the ecological systems upon which those communities depend. Upon receipt of the award, this investment was leveraged by project partners to provide an additional \$1.3 million dollars in research and conservation efforts in this priority coastal area.

Within the larger scope of this project, The NWF and Ipswich River Watershed Association (IRWA) led a community-driven process to assess community vulnerability and develop ecosystem-oriented adaptation strategies for the municipalities of Essex, Ipswich, Rowley, Salisbury, Newbury, and *Newburyport*. The planning process resulted in the development and engagement of cross-sector municipal resiliency task forces, six town-specific summary vulnerability assessments, community engagement workshops focused on community vulnerability and resiliency strategy planning and development, task force prioritization of near-term and long-term risk-reduction strategies, and ultimately the development of the Great Marsh Coastal Adaptation Plan.

² Newburyport Climate Resiliency Plan:

https://www.cityofnewburyport.com/sites/g/files/vyhlif7106/f/uploads/newburyport_climate_resiliency_plan_10-08-2020_final.pdf

³ National Wildlife Federation. 2017. Great Marsh Coastal Adaptation Plan. <u>https://www.nwf.org/-</u> /media/Documents/PDFs/NWF-Reports/NWF-Report_Great-Marsh-Coastal-Adaptation-Plan_2017.ashx

This effort, along with what had been completed via the EPA grant set the stage for the NRC to start formulating Newburyport's own Climate Change Resiliency Plan.

Newburyport Municipal Vulnerability Preparedness Workshop

Massachusetts Executive Office of Energy and Environmental Affairs (EOEEA), Final Report Issued May 2018

The Commonwealth of Massachusetts observed that while some coastal communities were attempting to develop risk assessments and resiliency plans, their focus narrowly considered only sea level rise and coastal flooding impacts. Furthermore, the processes being employed were not uniform. Climate change was having far reaching effects and would be affecting all municipalities, both coastal and non-coastal. Hence the Massachusetts Executive Office of Energy and Environmental Affairs developed the Municipal Vulnerability Preparedness (MVP) program as a means for Communities to consider all the potential climate change impacts, not just sea level rise and coastal storms. The standardized process served to level the field, allowing communities to become MVP certified and apply for grants to mitigate the risks identified via the MVP program. In early 2017, Newburyport sought, and was awarded, a grant from EOEEA to become an MVP certified community. The goal of the program was to not only identify community vulnerability imposed by climate change, but to also involve community residents, business owners and other stakeholders in the process.

On April 7, 2018, Newburyport held a Municipal Vulnerabilities Preparedness (MVP) workshop. The workshop's goal was to identify hazards Newburyport faced that were being exacerbated by climate change, and to prioritize actions the city could take to prepare for identified hazards. This workshop, planned by a core team of the NRC and the Horsley Witten Group, Inc. was a step towards MVP certification, which allowed certified communities access to additional state grants for projects related to climate change resiliency. Thirty-eight community members attended the workshop, representing a wide cross section of city officials, response partners, and other interested parties.

During discussion, participants concluded that the most relevant hazards to Newburyport were storms including nor'easters, winter storms, and hurricanes; bipolar weather including extreme cold, extreme heat, and drought; inland flooding; and sea level rise. In four small groups, participants listed features of Newburyport that may be impacted by climate change or may help the community cope with climate related hazards. Small groups then listed actions that could be taken to protect or utilize features to mitigate the impact of prioritized hazards. Following small and large group discussion and voting, participants prioritized seven action items.

The complete Newburyport Municipal Vulnerability Preparedness Workshop Report can be found here:

https://www.cityofnewburyport.com/recycling-energy-resiliency-sustainability/resiliency-sustainability

Wastewater treatment facility Climate Change Resiliency, Climate Change Vulnerability Report

As a result of participation in the Massachusetts MVP Program (discussed above), the city was awarded an MVP Action Grant in fiscal year 2018 to develop a Resiliency Plan for the Wastewater Treatment Facility (WWTF). The Plan was completed in June 2019 and assessed the vulnerabilities of the facility and provided measures and strategies to make the plant resilient to climate change impacts.

Newburyport Climate Resiliency Plan October 2020

This Resiliency Plan's focus is on Newburyport's short and long-term vulnerability to climate change. Its chapters address Newburyport-specific climate change hazards and vulnerabilities and recommends adaptation strategies to ensure that Newburyport remains a resilient community in the face of global warming, sea level rise, and climate change implications. These strategies include infrastructure installations and improvements, regulatory and administrative approaches, community communication and education, and mitigation through "carbon footprint" reductions. The Plan was published in October of 2020 and was followed by a public presentation of the Plan in February of 2021. Residents, business, and other local stakeholders were invited and encouraged to participate in the process.

Newburyport's Resiliency Committee meets 6-8 times per year in open meetings with published agendas and meeting minutes. The Resiliency Committee served as the Core Team for updating the city's HMP.

In the spring of 2021, the City of Newburyport requested that the Merrimack Valley Planning Commission (MVPC), coordinators and authors of the Merrimack Valley Multi-Hazard Mitigation Plan Update 2016-2021, assist the city in an individual HMP update. MVPC recently completed individual plan updates for nearby Merrimac and North Andover and was able to begin work with Newburyport in the summer of 2021. Given the extensive amount of recent climate resiliency planning and community outreach undertaken in Newburyport, the city had already done much of the work needed for the HMP update.

*David	Chatfield	Chairman
Donna	Holaday	Mayor
Barry	Connell	City Council President
*Andy	Port	Planning Director
*Christopher	LeClaire	Fire Chief
*Jon-Eric	White	City Engineer
*Molly	Ettenborough	Sustainability Manager
*Julia	Godtfredsen	Conservation Administrator
Joe	Teixeira	Conservation Commission Chair
Rishi	Nandi	Resident
*Jane	Healey	Resident

Newburyport's Resiliency Committee includes the following representation:

Janet	Daisley	Resident
Bret	LeFebvre	Resident
Heather	Lipp	Resident
Sarah	Tappan	Resident

* Participated in as part of Core HMP Planning Team

The full Newburyport Climate Resiliency Plan can be found here:

https://www.cityofnewburyport.com/recycling-energy-sustainability/resiliency-sustainability/links/newburyport-climate-resiliency-plan

Merrimack Valley Multi-Hazard Mitigation Plan 2016

In 2008, MVPC completed the Merrimack Valley region's initial HMP. In 2015/16 MVPC completed the first update of that Plan. This plan update builds upon that planning initiative with Newburyport as the sole planning area focus. Updated data regarding natural hazard events, demographics, non-natural hazards, and critical infrastructure have been incorporated into the document as well as the outcomes of the Newburyport's Municipal Vulnerability Preparedness Planning (2018) and Climate Resiliency Planning (2020) efforts which further incorporate climate change into the existing plan. New information regarding changes in development patterns, progress in local mitigation efforts, and changes in local and regional priorities have been incorporated into this update as well.

During the prior plan development of the Merrimack Valley Multi-Hazard Mitigation Plan, MVPC and local staff took numerous steps to coordinate all aspects of emergency management planning. Each municipality had a Comprehensive Emergency Management Plan (CEMP), and a Regional Homeland Security Plan in place. Accordingly, Newburyport's Hazard Mitigation Plan update includes goals and objectives that meet local needs and complement local and regional goals established in the CEMPs and Homeland Security Plan.

2.2 Preparing for Plan Updating Process

Since completing the Regional Multi-Hazard Mitigation Plan update, MVPC staff attended FEMA- and MEMA-sponsored hazard mitigation planning conferences including a oneday Local Mitigation Planning Workshop that included a Planning for a Resilient Community module. MVPC also reviewed state and federal guidance documents on the development of an updated and combined Hazard Mitigation and Climate Adaptation Plan. MVPC utilized the instructional manual, "Natural Hazards Mitigation Planning: A Community Guide" (January 2003), prepared jointly by the Massachusetts Department of Environmental Management (now the Department of Conservation and Recreation), the Massachusetts Emergency Management Agency, and the Massachusetts Hazard Mitigation Team. Special attention was given to the planning requirements described in FEMA's updated guidance document, "Local Mitigation Plan Review Guide" (October 1, 2011) *Planning Handbook (2013)*. Appendix A of that document, titled "A *Local* a detailed summary of FEMA's current minimum standards of acceptability for an updated plan's compliance with the Disaster Mitigation Act of 2000.

MVPC is a certified MVP provider and staff leading the HMP update planning process are trained in workshops to provide technical assistance to communities in completing the assessment and resiliency plan using the CommunityResilienceBuildingFramework (CRB). Certified staff is well versed in relevant resources including climate change projections for the Commonwealth and the region, found at the Climate Change Clearinghouse (resilientma.org). MVPC staff is also knowledgeable on how to incorporate nature-based solutions into the planning process, and how to integrate the MVP process with creating and/or updating a local Hazard Mitigation Plan.

Newburyport's Hazard Mitigation plan update included a review of City and regional planning documents including those listed above and the 2019 Regional Housing Production Plan, Newburyport Master Plan (2017), and the Newburyport Open Space and Recreation Plan (2020) as well as meetings with key staff within the City.

Comprehensive hazard maps were developed using the best available data with input from the City's Emergency Management staff and Department of Public Services. The maps depict the locations of natural hazard areas such as flood zones, as well as critical facilities and infrastructure. They also depict the location of residences and other buildings within the flood zones and form the basis for estimating the probable losses from potential natural disasters, such as severe flooding. These maps can be found in Appendix A.

The hazard identification and assessment process also included compiling information on the region's high-risk dams and structurally deficient bridges. This information was culled from several state data sources, including the DCR Office of Dam Safety and the Massachusetts Highway Department, and, where possible, was updated through input from knowledgeable local officials.

2.3 Hazard Mitigation Plan Core Team and Stakeholders

Project Announcement. The Merrimack Valley Regional Multi-Hazard Mitigation Plan expired in May of 2021. To maintain its eligibility for upcoming FEMA grant funding, Newburyport is required to have a current Hazard Mitigation Plan. Newburyport engaged MVPC to assist with the plan update in the summer of 2021. MVPC met with a core group of the Climate Resiliency Committee (see members marked with an asterisk above) on July 13, 2021.

Core Team Meeting. The city identified its Resiliency Committee as possessing the integral group of community representatives to lead the HMP update. This Committee meets an average of six times per year and has the following mission statement:

The committee will analyze, coordinate, and develop a plan in conjunction with regional planning to impacts of climate change including sea level rise, storm surge, flooding and extreme weather events throughout the city. Further, the committee will advocate for and oversee implementation of the plan's recommendations.

The Core team reviewed natural hazards of greatest concern, existing inventories including those of critical facilities and infrastructure, dams, bridges, and flood-prone areas, as well Newburyport Multi-Hazard Mitigation Plan 2022 12

as new developments and changes in land use. The resulting information was then used to compile the "Existing Protections Matrix" element of the Plan (see Section 5). Core Team members also provided valuable information to identify mitigation projects that have been completed or initiated since the prior Multi-Hazard Mitigation Plan was approved in 2016.

At their first meeting in July and their second on August 5, 2021, the Core Team reviewed the priority actions from both the MVP Final Report, the Climate Resiliency Plan, and the prior 2016 Hazard Mitigation Priority Action Plan to identify the full range of actions to be considered for the plan update.

A virtual meeting of the full Resiliency Committee and a group of community and regional stakeholders was set for August 18, 2021.

Stakeholders and HMP Planning Workshops. The Core Team engaged with stakeholders from its prior planning processes (MVP and Resiliency Plan) including a broad representation of community groups, board and commission members, and city staff with subject matter expertise from public services, building, planning, conservation, the council on aging, veterans, and other departments. The stakeholder list also included local elected officials and managers from neighboring communities as well as representatives from the business community, and nonprofit and environmental organizations. This broad representation of local and regional entities ensures the HMP update aligns with the policies, planning, and hazard mitigation strategies at different levels of government.

The invited Stakeholder representatives included:

Stakeholders

- Kassandra Gove, Mayor, Amesbury
- Tracy Blais, Town Manager, Newbury
- Angus Jennings, Town Manager, West Newbury
- Neil Harrington, Town Manager, Salisbury
- Christine Berry, Dept. of Conservation and Recreation (DCR)
- Noah Berger, Executive Director, MVRTA, Haverhill
- Diana DiZoglio, State Senator, First Essex District
- James Kelcourse, State Representative, First Essex District
- Joy Duperault, State NFIP Coordinator, DCR
- Vanessa Johnson-Hall, Essex County Greenbelt, Essex
- Wayne Castonguay, Executive Director, Ipswich River Watershed Association

- Matthew Thorne, Executive Director, Merrimack River Watershed Council
- Frank Giacalone, Director of Public Health
- Mark Murray, City Marshal, Police Department
- Paula Burke, Executive Director, Council on Aging
- Greg Earles, Building Inspector, Building Department
- Sean Gallagher, Superintendent, Newburyport Public Schools
- Tracy Watson, Executive Director, Newburyport Housing Authority
- Paul Hogg, Harbormaster
- Kevin Hung, Director, Veterans Services
- Joseph Muraco, National Grid
- Thomas Cusick, Water Treatment Superintendent, DPS Water Division
- Charles Tontar, Councilor At-Large, City Council
- Afroz Khan, Councilor At-Large, City Council
- Joseph Devlin, Councilor At-Large, City Council
- Sharif Zeid, Ward 1 Councilor, City Council
- Bruce Vogel, Councilor At-Large, City Council
- Jared Eigerman, Council President, Ward 2 Councilor
- Heather Shand, Ward 3 Councilor, City Council
- Christine Wallace, Ward 4 Councilor, City Council
- Jim McCauley, Ward 5 Councilor, City Council
- Byron Lane, Ward 6 Councilor, City Council
- Nancy Pau, Parker River National Wildlife Refuge
- Bonnie Sontag, Chair, Planning Board
- Joe Teixeira, Chair, Conservation Commission

2.4 Prior Planning Process and Outcomes

As discussed previously, Newburyport has conducted extensive prior planning regarding natural hazards and the associated actions to promote resiliency. During the MVP planning process, participants prioritized seven action items. <u>The City's Municipal Vulnerability</u> <u>Preparedness Plan</u> details the action items developed from the MVP process.

Newburyport Municipal Vulnerability Preparedness Workshop *Summary of Findings (May 31, 2018)*

On April 7, 2018, Newburyport held a Municipal Vulnerabilities Preparedness (MVP) workshop. The workshop's goal was to identify hazards Newburyport faces that are being exacerbated by climate change, and to prioritize actions the city can take to prepare for identified hazards. This workshop, planned by a core team of organizers and the Horsley Witten Group, Inc. was a step towards MVP certification, which allows certified communities access to additional state grants for projects related to climate change resiliency. Thirty-eight community members attended the workshop, representing a wide cross section of city officials, response partners, and other interested parties.

During discussion, participants concluded that the most relevant hazards to Newburyport were storms including nor'easters, winter storms, and hurricanes; bipolar weather including extreme cold, extreme heat, and drought; inland flooding; and sea level rise. In four small groups, participants listed features of Newburyport that may be impacted by climate change or may help the community cope with climate related hazards. Small groups then listed actions that could be taken to protect or utilize features to mitigate the impact of prioritized hazards. Following small and large group discussion and voting, participants prioritized the following seven action items:

- Enhance the resilience of the Wastewater treatment facility. Specifically, in the short term, protect and flood proof the Wastewater treatment facility, and in the long term (estimated 40-50 years, at the close of the useful lifespan of the current facility), relocate the wastewater treatment facility.
- Create a short term and long-term plan for the city's management of Plum Island, including discussion of access via the Plum Island turnpike, dune and floodplain management and potential retreat from current residential areas.
- Enhance emergency preparedness and response procedures. Specifically, improve participation in and use of the community's Code Red system, and enact an educational program to help residents improve their family's emergency preparedness.
- Develop a resiliency study of the Lower Artichoke Reservoir Dam to improve protection of the public water supply.
- □ Improve flood protection of utilities (water, sewer, electric, and gas). Specifically, require an annual accountability report from all utilities in the community.
- Create an inventory of coastal infrastructure (e.g., seawalls, boat ramps, bulkheads, and jetty) and conduct an assessment evaluating the efficacy of each component.
- Evaluate and plan for raising roadways and modifying culverts in areas of the city where it may be needed due to current or potential inundation risks (e.g., Water Street, Business Park, and Malcolm Hoyt Drive).

The City of Newburyport expanded upon these initial findings in its 2020 Climate Resiliency Plan. This plan discussed in greater detail the following Climate Hazards:

1. Sea Level Rise

Newburyport Multi-Hazard Mitigation Plan 2022

- 2. Coastal Storms Extra Tropical, Tropical, and Hybrid Cyclones
- 3. Heavy Precipitation Events
- 4. Flooding
- 5. Wind
- 6. Tornados
- 7. Weather Extremes Drought, Heat Waves, Winters and Cold Snaps, Persistent Precipitation
- 8. Insect Disease Vectors Tick and Mosquito related illness
- 9. Combined Sewer Overflows (CSOs)

The plan further identified strategies to mitigate risk exposure including a mixture of protection, adaptation, and retreat with suggested timelines of immediate, short term (current day to 2030), and long term (2030 -2070). The strategies fall into four main strategic areas:

- Infrastructure Installations/Improvements
- Regulatory and Administrative Approaches
- Community Communication and Education
- Mitigation through Carbon Footprint Reductions

The following is a summary of the more than 150 recommendations developed by the Resiliency Committee:

Resiliency Plan Summary Recommendations:

Infrastructure installations/improvements

- Immediately deploy methods to protect vulnerable Critical Assets from inundation.
 - o Water Supply
 - o Wastewater Treatment Facility
 - o National Grid Substation
- Develop, evaluate, and implement plans for permanent protection of the water supply
- Develop and evaluate plans for protecting low lying sanitary sewer lift stations and in the long-term the future relocation of the WWTF and National Grid facilities.
- For the areas surrounding and including Cashman Park and Waterfront Park, perform a design, cost and feasibility analysis that considers elevating or protecting these properties to preserve their amenities vs. adapting and transitioning the assets to alternate uses in a rising sea and surge scenario.
- Strengthen the electrical grid by reducing conflicts with trees, burying utilities and evaluating micro grids.

Regulatory and Administrative Approaches

- As some shoreline areas will become uninhabitable sooner than others, use sea level rise (SLR) and inundation projections to prepare an inundation timeline for neighborhoods along the river and Plum Island.
- Review, evaluate, and revise zoning and building regulations to improve resilience, water conservation, energy efficiency and discourage development in the FEMA high hazard flood zones.
 - o Develop and adopt a design flood elevation for all new and proposed renovations of properties in the FEMA high hazard flood zones.
 - o Continue to enforce existing Wetlands Protection act regulations.
- Develop and implement a task force to develop with Newbury and implement a long-term, sustainable, science-based plan to address the multifaceted challenges facing Plum Island. Continue to work with the Merrimack River Beach Alliance, the Plum Island Foundation, the U.S. Army Corp of Engineers, Legislators and State Agencies in this process.
- Evaluate alternative access options to Plum Island.
- Develop and implement an automated water quality monitoring and warning system to protect residents from the health risks associated with combined sewer overflows (CSOs). Continue to work with legislators to support efforts to upgrade upriver wastewater treatment facilities to reduce CSOs.
- Implement a storm water/impervious surfaces management program in compliance with EPA MS4 permit. Impervious surfaces contribute to flooding, raise summer temperatures citywide through heat island effects, and increase the cost of snow removal.
- Develop alternative revenue streams to fund the city's budget and pay for resiliency and emergency response activities. As future sea level rise and inundations begin to claim shoreline properties, resiliency costs will increase, and current sources of real estate tax revenues would decline.
 - o Design and implement a storm water utility
 - o Evaluate a differential tax rate for properties located within the FEMA high hazard flood zones.
 - o Evaluate additional use tax strategies

Community Communication and Education

- Develop recommendations for personal resilience to assist and educate residents to make their households resilient to climate hazards.
- Develop a property owner's flood resiliency guide and educate property owners of acceptable methods to flood proof their properties.
- Engage with the community to determine under what circumstances and resources, that a managed retreat from shoreline areas would be acceptable.
- Educate and alert residents to emerging public health impacts related to heat, air and water quality, residents of the need to evaluate and strengthen their own personal resilience to climate hazards.

 Develop a public outreach and education program to educate residents about this resiliency plan. Specifically: promote personal preparedness, community resiliency, natural hazard mitigation, public health impacts, CPR, First Aid training and managing carbon footprints. Create school-based programs to educate future generations about climate change impacts and resiliency.

Mitigation through Carbon Footprint Reductions

- To mitigate climate change and temper hazards for future generations, Newburyport and each of its residents must do their part to achieve communitywide net-zero emissions by 2050. To that end, track the current municipal carbon footprint and implement a program to quantify and track the impact of residential households. Implement an annual program of residential carbon footprint reporting.
- Increase the use of renewable energy versus fossil fuel energy citywide.

Having undertaken this extensive planning work related to hazard mitigation, the City of Newburyport utilized the August 18, 2021, stakeholder meeting to affirm and prioritize actions to mitigate hazards related to key vulnerabilities in the city. The virtual meeting was hosted on zoom and the outcomes of online polling completed using PollEverywhere can be found in Appendix B. This meeting served to inform the Mitigation Action Plan presented in Chapter 9.

2.5 Listening Sessions, Other Public Forums and Opportunities for Community Involvement

Efforts to adopt new mitigation activities can be constrained by the general public's lack of awareness and understanding of natural hazards and their risks. Collaboration aimed at clarifying goals, priorities, and desired outcomes is essential to an effective hazard mitigation planning process. Accordingly, a public involvement process was utilized to encourage governmental entities, adjacent communities, residents, businesses, and nonprofit organizations to participate in the planning process.

In addition to including these public entities in the stakeholder groups, Newburyport held two listening sessions; one to review the outcomes of the HMP Planning process and draft plan and the second to review the final HMP Plan before adoption by the City Council.

The first session was held virtually on May 18th 2022. The public meeting was advertised on the Public Meetings Calendar on the city website and was also promoted on the city's social media accounts. All Core Team members and Stakeholders were invited via email. The meeting was held virtually with over 20 participants. In conjunction with MVPC, the City of Newburyport presented the priority actions identified during the planning process and facilitated discussion with attendees.

The second listening session will be held once comments from MEMA and FEMA have been received and the plan is ready for presentation to the Board of Selectmen. Agendas for all meetings can be found in Appendix C. A summary of all public meetings is presented in the following table:

Meeting	Date	Attendees
Project Kick-off Meeting	July 13, 2021	Core Team
Core Team Meeting	August 5, 2021	Core Team
HMP Planning Meeting	August 18, 2021	Core Team & Stakeholders
Additional Planning Meetings	September 2, November 23, and December 21, 2021	Core Team
Listening Session 1	May 18, 2022	Core Team, Stakeholders, Public
Listening Session 2		Core Team, Stakeholders, City Council, Public

2.6 Continuing Public Outreach

Following MEMA and FEMA approval of Newburyport's Multi-Hazard Mitigation Plan, the city's Resiliency Committee will regularly review the plan and include accomplishments as achieved. Also, the Committee will meet annually to evaluate the effectiveness of the mitigation and risk reduction strategy and update as needed. All plan revisions/additions will include public participation and meetings will be publicly noticed per city and state open meeting laws.

SECTION 3. COMMUNITY PROFILE

This section of the Plan provides an overview of Newburyport and includes updated information on the city's population and economy, land use, transportation network, water resources, protected open space, and historic/cultural resources. It is intended to provide context for the natural hazard characterizations, assessments, and mitigation actions that follow later in the Plan.

The Historic Seaport City of Newburyport is located on the Northeast coast of Massachusetts, along the southern bank of the Merrimack River. The city's easterly extent touches the Atlantic Ocean along the northern shores of Plum Island. There, Newburyport shares the Merrimack River inlet with the town of Salisbury located across the river to the north. In addition to Salisbury, three other towns share Newburyport's border: West Newbury along the river to the west, Amesbury across the river to the northwest, and Newbury (including much of populated Plum Island), to the south.

The city has a total area of 10.6 square miles, of which 22.5% is wetlands or open water. The city's northern border is the <u>MerrimackRiver</u>. The Artichoke Reservoir, shared with the Town of West Newbury, is at the western border of Newburyport.

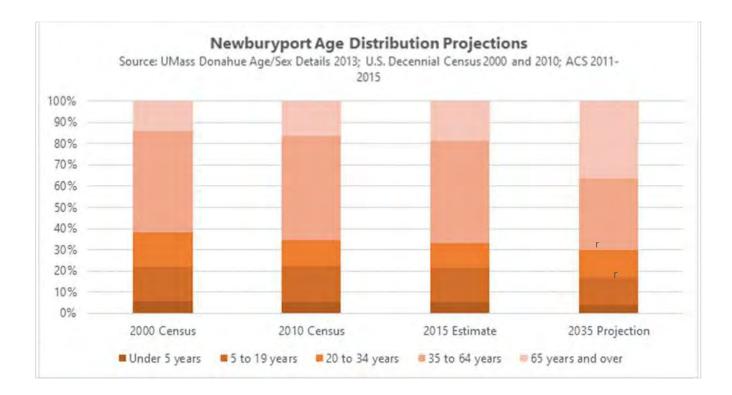
3.1 Current Population, Housing, and Employment

Population. Newburyport's population, as reported by the U.S. Census Bureau's 2020 dataset, is 18,289 people – an increase of 5 percent from 2010. The population of Massachusetts (state) and Essex County (county) increased about 7.4 percent and 8.9 percent respectively between 2010 and 2020.⁴ The estimated population of the region increased 10.8 percent in the same period.

Per the UMass Donahue projections, the age composition of Newburyport's population is anticipated to change with a 118 percent increase in the number of older adults (age 65 years and over), a 25 percent decrease in the number of school age children, and a 32 percent decrease in the number of adults aged 35 to 64. The median age in Newburyport was estimated to be 46.97 years in 2019, which is higher than the county's median age of 40.11 years and the state's median age of 39.33 years.⁵

⁴ https://data.census.gov/

⁵ City of Newburyport Housing Production Plan 2018-2022 prepared by Merrimack Valley Planning Commission with JM Goldson community preservation & planning. <u>https://mvpc.org/demographics/</u>



The U.S. Census Bureau, per the ACS, defines disability as including go-outside-home, employment, mental, physical, self-care, and sensory.⁶ Newburyport's estimated disability rate (9 percent of total non-institutionalized population)⁷ is slightly lower than the region (11 percent), county (12 percent), and state (12 percent). The estimated percentage of children under 18 years with a disability in Newburyport (4 percent) is slightly lower than the region (5 percent), county (6 percent), and state (5 percent), and the estimated percentage of adults ages 18 to 64 years with a disability is slightly lower in Newburyport as well (6 percent) than the estimated 9 percent of population in this age cohort in the region, county, and state.

However, there is still an estimated 24 percent of older adults age 65 years and over with disabilities. Newburyport stakeholders identified senior populations and individuals with disabilities as more vulnerable to climate change and emergencies and disasters overall.

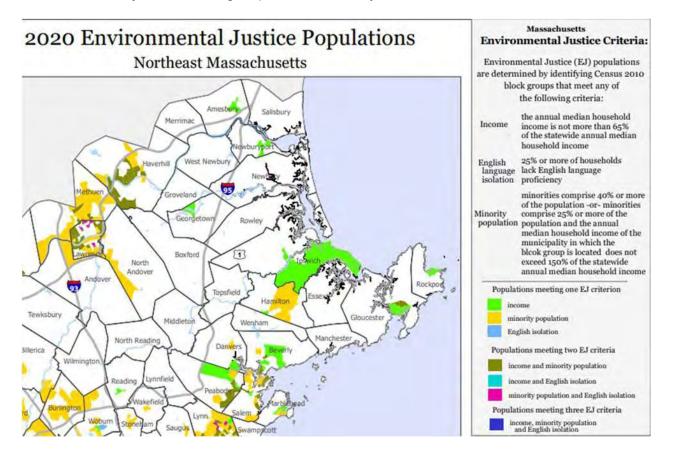
Environmental Justice. Since 2002, the Massachusetts Executive Office of Energy and Environmental Affairs has been implementing an Environmental Justice (EJ) Policy to help ensure that all Massachusetts residents experience equal protection and meaningful involvement concerning development, implementation, and enforcement of

⁶ U.S. Census Bureau, American Community Survey definition of disability:

https://www.census.gov/people/disability/methodology/acs.html

⁷ The U.S. Census Bureau defines non-institutionalized population as all people living in housing units, including non-institutional group quarters, such as college dormitories, military barracks, group homes, missions, or shelters. Whereas, institutionalized population includes people living in correctional facilities, nursing homes, or mental hospitals. <u>https://www.census.gov/topics/income-poverty/poverty/guidance/group-guarters.html</u>

environmental laws, regulations, and policies, and the equitable distribution of environmental benefits. Historically, land-use decisions in Massachusetts caused lowerincome people and communities of color to experience a disproportionate share of environmental burdens and often lacked environmental assets in their neighborhoods.⁸ The state has identified Environmental Justice (EJ) neighborhoods that are comprised of EJ populations.⁹ Vulnerable populations such as EJ neighborhoods should be given special consideration when planning for current and future hazards. Newburyport has two environmental justice block groups as defined by the Commonwealth.



⁸ Source: MA Executive Office of Energy and Environmental Affairs

⁹ Environmental Justice (EJ) Populations are those segments of the population that the Massachusetts Executive Office of Energy and Environmental Affairs has determined to be most at risk of being unaware of or unable to participate in environmental decision-making or to gain access to state environmental resources. They are defined as neighborhoods (U.S. Census Bureau census block groups) that meet one or more of the following criteria: 1) The median annual household income is at or below 65 percent of the statewide median income for Massachusetts; or 2) 25% of the residents are minority; or 3) 25% of the residents are foreign born, or 4) 25% of the residents are lacking English language proficiency. https://www.mass.gov/doc/environmental-justice-policy6242021- update/download

Race and ethnicity. Per the 2020 Census, Newburyport's population continues to racially identify primarily as white alone, with an estimated 91 percent; this is a slight decrease from 2010 when 96 percent of the population identified as white alone. In the region, about 73 percent of the population identified as white alone in 2019, down from 77 percent in 2015. The region is becoming more racially diverse, while Newburyport remains primarily white. About 2.5 percent of Newburyport's population (of any race) identifies as having Hispanic/Latino ethnicity, whereas 27 percent of the region's population identifies as having Hispanic/Latino ethnicity. Despite lower reported ethnic diversity, language barriers need consideration during the hazard mitigation planning process and actions to increase communication in multiple languages is recommended.

Economic. Roughly 48 percent of Newburyport's total labor force is employed in the industries of management, business, science and arts. About 18.5 percent is employed in sales or office occupations, and about 17 percent is employed in the service industry according to the 2019 ACS. The remaining employed population works in the fields of natural resources, construction, and maintenance and production, transportation, and material moving. In March of 2020, the COVID-19 pandemic shuttered many businesses, with the greatest losses seen in the leisure and hospitality industries. At that time, the unemployment rate in Newburyport was reported at 2.5 percent with the Lower Merrimack Valley being reported at 3.3 percent. In January of 2021, the Newburyport rate was reported at 6 percent with the Lower Merrimack Valley Region at 7.9 percent. As vaccination rates increased, unemployment dropped and in June of 2021, Newburyport's rate was 3.5 percent with the Lower Merrimack Valley at 5.4 percent.¹⁰

Per the 2015 to 2019 ACS estimates, about 50 percent of Newburyport households have a 31-minute mean travel time to work. This is higher than the average in the county (30.4 minutes), and state (30.2 minutes). About 14 percent of Newburyport households commute over an hour, which is similar to the region, county, and state.

In 2019, the MVPC Data Portal reports that there were 1,528 business establishments in Newburyport. The number of establishments compared to the number of jobs in the city reveals that most local businesses are small employers or selfemployed individuals. The sectors with the most employees in 2019 were Health and Medical Services, Professional Services, and Real-Estate. Newburyport is a regional hub for employment, as well as a regional destination for culture, entertainment, commerce, and recreation. Newburyport also draws visitors from farther afield, providing opportunities for history and architecture buffs, birders, boaters, beachgoers, trail-users, and others who enjoy the attractive downtown's festivals, shops, and restaurants.¹¹ The largest employer is the City of Newburyport is Anna Jaques Hospital with 694 employees according to the MVPC Data Portal.

¹⁰ Labor Market Information | Mass.gov

¹¹ Newburyport Open Space & Recreation Plan, 2020

Roughly 73 percent of Newburyport's occupied housing units were owner occupied and 27 percent renter occupied, which is a lower proportion of renter housing than in the region. In comparison, the region, county, and state had a greater percentage of renter-occupied units (37, 37, and 38 percent, respectively).

Although the rate of single-family residential growth has fluctuated with economic cycles, single-family development has generally been consistent over the past 30 years. More recently there has been an increase throughout Newburyport in housing density resulting from infill and redevelopment of existing smaller house lots. This is particularly true on Plum Island, which is particularly sensitive to development and the adverse effects from rising sea levels and severe storm events. During the period between 2012 and the present, Newburyport has issued 337 building permits for new housing construction. In a community as densely developed as Newburyport, where housing costs remain high, demand for housing can sometimes present a challenge for open space protection efforts.

Consistent with state and national trends, Newburyport home sales prices have continued to rise over the past eight years. And while market demand remains strong, land available for new housing development is limited. From a natural disaster (especially *flooding*) perspective, the sprawl pattern of development has undesirable consequences, not the least of which are an accelerated loss of open space and natural flood storage capacity, increased impervious surface cover, and increased stormwater runoff. The 2017 Newburyport Master Plan notes that, "based on existing zoning, the city's residential districts could accommodate up to 128 new units of single-family housing. The Master Plan suggests the Central Waterfront will likely be redeveloped into parkland; restricting further subdivision of land along scenic High Street and ridgeline; and restricting development on Plum Island.¹² Development in flood-prone areas exacerbated by severe storms and sea level rise is a particular concern.

3.2 Land Use Characteristics and Trend

Newburyport is one of the smallest cities in the state and is defined by the watershed of the Merrimack River, which serves as the northern border of the city. Newburyport's character is shaped by its physical location along the south side of the Merrimack, where its historic harbor reaches the Atlantic at the northern point of Plum Island. The Artichoke river, which flows into the Merrimack River, forms part of the city's western boundary. The location and extent of these



¹² Newburyport Open Space and Recreation Plan 2020

resource areas have little relationship to the political boundaries that separate Newburyport from adjacent communities or the Commonwealth of Massachusetts.

As mentioned in previous sections, the greatest development pressures come from infill development and redevelopment of existing housing with larger homes. Plum Island is an area particularly sensitive to this development as it a barrier island threatened by sea level rise and erosion from wave action.

Table 3.2.1 presents the most recent (FY2020) land use information available for Newburyport. The information was developed based on assessment data/parcel land use codes. The table shows total acreage within each category as well as the percent cover of each category within the city. Also included is the percentage of land within the Zone A and Zone X Flood Areas per the FEMA Flood insurance rate maps. These areas are further defined in Chapter 4 (Natural Hazards section) of the plan.

Table 3.2.1 Newburyport Land Use FY21						
	Acres	Rounded Percent	Acres in Zone A	% in Zone A	Acres in Zone X	% in Zone X
Agriculture	362.86	5.2	0.0093	0	52.58	0.75
Commercial	211.01	3	28.3088	0.41	4.2	0.06
Industrial	362.68	5.2	22.044	0.32	0.451	0.01
Institutional	836.43	12	141.35	2.03	8.88	0.13
Mixed Use	2.18	0	0.1175	0	0.1494	0
Multi Family	376.29	5.4	28.41	0.41	4.54	0.07
Open Space	956.15	13.7	201.42	2.89	0.3874	0.01
Single Family	1273.77	18.3	111.124	1.6	10.66	0.15
Vacant Commercial	7.56	0.1	0.8744	0.01	0.75	0.01
Vacant Industrial	98.84	1.4	9.405	0.14	0.1065	0
Vacant Residential	184.09	2.6	19.319	0.28	0.26	0
Water	1563.52	22.5	915.305	13.14	0.14	0
ROWs & Rail ROWs	724.20	10.4	35.107	0.5	10.56	0.15
Unknown Parcels	4.72	0.1	4.3	0.06	0	0
Total	6964.28	99.9	1517.094	21.79	93.6643	1.34

The largest category of developed land use in the Merrimack Valley region is residential. This includes all residential dwelling types, from large lot, single-family homes to multi-family apartments and condominiums. In Newburyport, assessment data shows that, with "water" removed, approximately 76% of city land currently supports development. Land that supports agriculture, open space, and recreation is approximately 24%.

Of the undeveloped Open Space and Recreation Plan notes that "negative impacts of new development can be profound if they are not guided with appropriate policies and land *Newburyport Multi-Hazard Mitigation Plan 2022* 25 use regulations designed to protect natural resources, preserve historic features, and retain desired community character." Newburyport has sought to guide future development and protect essential resources by undertaking different strategic planning efforts, recognizing the need to adjust land use planning to direct growth to appropriate areas and to preserve the conservation values of critical open space. Approximately 19 acres of residential land lies within a floodplain area. Development in floodplain areas is regulated by the Newburyport Zoning Ordinance and the Newburyport Conservation Commission.

The City of Newburyport Planning Board is the primary agency responsible for regulating development. The Newburyport Planning Board, through its staff, provided feedback during the local hazard planning team meetings. In addition, Merrimack Valley Planning Commission, the city's regional planning authority, works with all agencies that regulate development in its region, including the municipalities and state agencies, such as Department of Conservation and Recreation and MassDOT. This continued involvement ensured that during the development of the City of Newburyport Hazard Mitigation Plan, the operational policies and any mitigation strategies or identified hazards from these entities were incorporated.

A buildout analysis is an estimate of the maximum amount of development that can theoretically occur under the existing zoning regulations. By itself, the buildout analysis is not a prediction of the amount of development that will occur; but an estimate of the level and types of development that Newburyport could see as a function of existing zoning bylaws and regulations. Build-out potential is important in understanding development pressure on Newburyport's natural resources. The 2017 Newburyport Master Plan notes that, "based on existing zoning, the city's residential districts could accommodate up to 128 new units of single-family housing. The Master Plan suggests the Central Waterfront will likely be redeveloped into parkland; restricting further subdivision of land along scenic High Street and ridgeline; and restricting development on Plum Island.¹³

Newburyport has one of the highest commercial/industrial sectors among Merrimack Valley communities. The Business Park located roughly between Hale Street, Low Street, Route 1, and the Newbury border, is home to approximately 60 large-scale industrial businesses. Several manufacturing businesses are located outside of the business park. A stated goal of the of Newburyport's 2017 Master Plan is to "enable new and expanded commercial and industrial use at the Business Park to generate at least 15% of the city's property tax revenues."

The busy Storey Avenue area located near the intersection of I-95 and Route 113 is home to several banks, three gasoline pumping stations, two major supermarkets with adjoining strip mall businesses, fast food franchises, office buildings and apartment/condo complexes along with their associated impermeable parking lots. As more land is developed, additional impervious surface is created, thereby decreasing the area available for flood storage and increasing the flood risk, a concern cited in Newburyport's MVP and

¹³ <u>City of Newburyport Massachusetts Master Plan 2017</u> Newburyport Multi-Hazard Mitigation Plan 2022

Climate Resiliency Plans. As population and housing density increase, the potential for property damage and economic loss as a result of a natural disaster also increases.

3.3 Transportation Network

Newburyport has an increasingly robust transportation network that includes local roadways, major highways, bike lanes, sidewalks, multi-use trails and public transportation.

Roadways

Newburyport is accessed by a network of local roadways and highways, including State Routes 1, 1A and 113, as well as I-95, with close connections to I-495 in Amesbury. Virtually all of the roads in the Merrimack Valley region are administered by either the Massachusetts Department of Transportation (MassDOT) or the municipality in which the road is located. While individual communities often make minor improvements to the federal-aid roadway network in the region, the federal government and/or MassDOT fund almost all major highway improvements.

Publicly available electric vehicle charging stations are located at the Harris/State Streets parking lot as well as at the parking garage on Merrimac Street.

Active Transportation

The City of Newburyport has been developing a network of multi-use trails and connecting corridors that not only provide safer and better access within Newburyport, but also

connect to Salisbury, Amesbury and Newbury as part of the Coastal Trails Network. The city has developed a looped rail-trail that connects to the Commuter Rail Station, providing additional multi-modal connections. Bicycle parking has increased throughout the downtown area.

The City of Newburyport has a network of sidewalks as well as two bike lanes -- one on High Street and one on water Street/Plum Island Turnpike. The city adopted a Complete Streets policy and received its first grant from MassDOT for



infrastructure implementation. The city has participated in MassDOT's Safe Routes to School program resulting in safer pedestrian access.

Transit. Newburyport Route 54, which connects directly to Amesbury, Newburyport, and Salisbury and has connections to the fixed route to the City of Haverhill. Route 57 was created as downtown Newburyport Shuttle. In addition, the MVRTA provides ondemand service to people with disabilities and those who are ages 60+. The Council on Aging van provides additional local transportation services for seniors. Newburyport Multi-Hazard Mitigation Plan 2022

The Massachusetts Bay Transportation Authority (MBTA), based in Boston, supplements the MVRTA bus system by providing commuter rail services to Newburyport. The train station can be accessed via car, bus, biking and walking. Private carrier, C&J Trailways provides commuter bus service to the area from Seabrook, NH.

Air, Water and Other Transportation.

The closest airports are in Manchester, NH and Boston. The small, historic Plum Island airfield allows arrivals and departures by small aircraft. Access by air year-round is also possible via the Helipad Located at Anna Jaques Hospital, though its intended use is for emergency medical evacuations. Active marinas and docks also allow boaters to use the Merrimack River as an access point to the city. As there are no ferry services, marine



access is via pleasure and charter craft. Taxis, seasonal pedi-cabs and ride-hailing services such as Uber and Lyft (also known as Transportation Network Companies or TNC) serve residents and visitors. According to Massachusetts Department of Public Utilities, in 2019 over 55,000 TNC trips originated in Newburyport (https://tnc.sites.digital.mass.gov/).

3.4 Water Resources and Public Water Supplies

Water Resources. The communities in the region share many resources. The most significant is the 180-mile Merrimack River and its watershed. The Merrimack River watershed is New England's fourth largest, covering 5,010 square miles and including



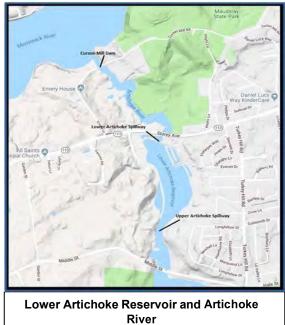
more than 200 cities and towns. More than 600,000 people use surface water from the Merrimack River for drinking water including the environmental justice communities of Lowell and Lawrence, Methuen, Tewksbury, and other towns. Other communities in the region rely on the Merrimack's groundwater resources. There are unconsolidated sand and gravel aquifers along the Merrimack River and its major tributaries that can sustain well yields of more than 300 gallons per minute (gpm). Newburyport and Salisbury together are the most downstream communities within the Merrimack River's Watershed. They are the last municipalities through which the river flows before it empties into the Atlantic Ocean.

In addition to the Merrimack, headwaters of the Little River begin west of I-95 near the intersection of Storey Avenue and Turkey Hill Road and meanders along the abandoned I-95 roadway. Its main eastern tributary begins near the shopping centers behind Storey Avenue. The Little River then flows along the southwestern and then southern edge of the business park, ultimately emptying into the Parker River. The Parker flows through the Great Marsh and into Plum Island Sound with the waters ultimately emptying into the Atlantic Ocean in Ipswich Bay. The Little River drains the area along I-95, Storey Ave, and much of Newburyport that slopes toward Low Street.

Finally, overflow from Newburyport's Artichoke drinking water Reservoir passes over the Lower Artichoke dam located along State Road 113 into a small tributary called the Artichoke River which borders West Newbury. This sometimes tidally influenced tributary slowly meanders for $\frac{3}{4}$ of a mile and empties directly into the Merrimack River.

Public Water Supply Newburyport's drinking water comes from both surface water and groundwater supplies. Four surface water reservoirs, which represent 80% of the city's drinking water supply, include the Indian Hill Reservoir in West Newbury, the Upper and Lower Artichoke Reservoirs in both West Newbury and Newburyport, and the Bartlett Spring Pond in Newburyport. These surface reservoirs supply 780 million gallons of water primarily to Newburyport and some also to the towns of Newbury and West Newbury.

The watersheds for the city's reservoirs are primarily a mixture of residential, agricultural, recreational and forestland. Most of the land abutting the surface reservoirs lies in West Newbury and is privately owned. Groundwater, which accounts for 20% of the drinking water, is supplied by two gravelpacked wells located on Old Ferry Road (Well #1) and Ferry Road (Well#2). A drinking water treatment



plant (WTP) located on Spring Lane near Well #1 treats the surface water supplies and the water from Well #1. Groundwater from Well #2 is minimally treated at the well and is directly connected to the city's water distribution system. The Plant is permitted to treat and deliver 2.5 million gallons per day (MG/D), but on average treats 1.6 MG/D. A chlorine booster station is located next to the Plum Island drawbridge to inject chlorine into the water distribution system.

The Newburyport Open Space Committee continues to work with the citv's Water Division to protect other lands important to the drinking water supply and quality, consistent with the 2002 Water Works Master Plan, which recommends that the "city should protect Newburyport Multi-Hazard Mitigation Plan 2022 29

sensitive parcels of land through purchase, easement, conservation restrictions and other protective mechanisms." Moreover, a water supply yield/estimate performed in 2017 showed adequate water supply for anticipated needs through 2040.

Water supply was a top concern of Newburyport stakeholders as future sea level rise and more intense storms increase the vulnerability of these resources. The public water supply is vulnerable and requires action to avoid being compromised by river flooding or an extreme weather event. The Lower



Upper Artichoke Spillway

Artichoke dam's spillway currently sits approximately 3 feet lower than FEMA's 100year flood elevation. Thus, a lesser storm could overtop the spillway with CSO tainted Merrimack River waters thereby cutting off access to 75% of the city's water supply.

3.5 Protected Open Space and Prime Farmland

Newburyport is blessed with an abundance of ecologically rich and visually stunning open space resources. This range includes approximately 2,913* acres of open space. It is home to 37 municipal and private parks, 6 public and private cemeteries, and an array of non-profit land and private open spaces protected by conservation restrictions. Together

this mix of open space helps to define the character of Newburyport, playing a vital role in fostering civic pride, public health and wellbeing, biodiversity and economic development.¹⁴

Together, these rich resources provide outstanding and diverse:

- habitat and migration corridors for numerous wildlife species, birds, fish, and plants;
- surface and groundwater source protection for the public drinking water supply as well as private drinking water wells;
- productive soils for agriculture, horticulture, and farming; and
- natural buffers for protection against flooding.



They also serve as a draw for recreational hikers and other outdoor enthusiasts and naturalists. Newburyport's prime open space resources are critically important to

¹⁴ Newburyport Climate Resiliency Plan, 2020

^{*} Open space land use is calculated by assessor code which yields different acreage than a parcel inventory

the overall character, economic vitality, and quality of life, and as such warrant ongoing maintenance and sustainable use.

Prime Farmland

Historic agricultural vestiges such as outbuildings, barns, silos, stone walls and tilled fields reinforce a Community's sense of place, as do its open spaces and scenic landscapes. Newburyport has several landscapes that retain their agricultural character and naturally



scenic qualities. Several farms are listed in Newburyport's open space inventory the historic Arrowhead Farm (28 acres), a portion of which has been protected since 1993 by a conservation restriction held by the state Department of Conservation and Recreation. Located near Maudslay State Park, Arrowhead Farm grows vegetables and some fruit (and raises livestock). Another is Ferry Landing Farm (25 acres) which is

covered by an early version of an agricultural preservation restriction, held by the state Department of Agricultural Resources. The Open Space Committee is interested in strategies that would strengthen protections for this parcel.¹⁵ Hayfields dominate fields in privately owned farms – Sweeney Farm and Turkey Hill Farm – in the Newburyport section of the Common Pasture.

Undeveloped land provides many benefits to the community including clean water, wildlife habitat, rural character, wood products, food, livestock grazing, and outdoor recreation. Chapter 61, 61A and 61B provides a tax incentive to property owners who maintain their properties in a natural state. Chapter 61 applies to forest lands used for growing products such as wood and timber. Chapter 61A is intended for land kept in active agricultural use. Chapter 61B is for land kept in its natural state, or for certain recreational purposes. Currently, there are 16 parcels totaling about 369 acres temporarily protected in the Chapter 61A program in Newburyport.

Open, productive farm tracts are typically the most easily developed land because their deeper soils make excavation easier, their drainage is good, and they lack wooded cover. As a result, they are ideal for most commercial and residential development projects and can often command top dollar. In the face of this constant development pressure, local farmers are finding it increasingly difficult to hold on to their coveted lands indefinitely. Newburyport stakeholders recognized the vulnerability of the critical natural resource functions open lands provide, including infiltration and flood protection, and recommended a collaborative effort to implement strategies that both strengthen the economic viability of farming and protect farmland in perpetuity.

¹⁵ Newburyport Open Space & Recreation Plan, 2020

3.6 Historic and Cultural Resources

The preservation of historic and cultural resources must be carefully considered to protect the character of the Merrimack Valley region's city, town, and village centers. Many colonial-era residences, mill structures, and village greens are already protected to some extent through the establishment of historic districts. However, additional consideration should be given to protecting such resources from potential natural hazards. Historic inventories and plans are essential in guiding historic preservation initiatives, and such plans should consider hazard mitigation. Effective preservation of these resources requires active stewardship and support of the community as a whole.

The community's treasured heritage landscapes include Newburyport's historic Merrimack River harbor, identified for more than two centuries with shipbuilding; Newburyport's extensive colonial and federal-era streetscapes (part of a very large National Historic Register District); its timeless marshes and beaches; Maudslay State Park (the former Moseley Estate); and the Common Pasture. Other cultural heritage sites include an early 19th century powder house, an 18th century grist mill operated on the Artichoke River, and a Merrimack ferry crossing. (President George Washington crossed the river at the site.)

Later years in Newburyport's history added mills and shoe factories – distinctive brick structures now converted into homes and offices – as well as rail lines, one segment of which has been converted into a rail trail. Salt-hay heiress Anna Jaques made donations to fund a hospital (since relocated and rebuilt within Newburyport). Historic lighthouses, specially aligned to assure safe navigation to and from the Atlantic, enrich Newburyport's character and help convey its importance as the birthplace of the U.S. Coast Guard. Plum Island served as both a staging area for rescues of sailors and ships, and as a relatively sedate resort destination. Many of Newburyport's historic cemeteries date from the colonial and revolutionary eras, and several parks and schools date from the 19th century.



Plum Island Lighthouse

A centrally located Frog Pond and its surroundings, used in

colonial days for grazing, and later for training local militias, became the grand Victorian- era Bartlet Mall, with formal walkways and stately elms. Brown Square, dignified by a statue of Newburyport's famed abolitionist, William Lloyd Garrison, has long been a site of outdoor civic events.¹⁶

COSTEP-MA (Coordinated Statewide Emergency Preparedness in Massachusetts <u>https://mblc.state.ma.us/costepma/</u>) is a collaborative of representatives of cultural and historical institutions and agencies as well as first responder and emergency management professionals from federal, state, and municipal governments. COSTEP- MA promotes

¹⁶ Newburyport Open Space and Recreation Plan 2020

proactive steps to reduce losses from natural hazards, especially flooding or water damage following fires, through cooperative, team-building activities in communities through educational activities within the cultural heritage and emergency management communities. COSTEP-MA has worked to develop an Annex to the state's CEMP and to promote education and cooperation in communities to enhance the protection of cultural resources from natural disasters.

3.7 Demographic Trends and Projections

In considering exposure to natural hazards, it is important to assess population and development trends. As more land is developed, the additional impervious surface increases the flood risk and decreases available flood storage area.

In the 2018 City of Newburyport Housing Production Plan, the UMass Donahue Institute projected that between 2020 and 2030, Newburyport's population would decline by 2.6 percent, from 17,934 to 17,462, and would continue declining after that. However, it is important to remember that because many factors affect population change, it cannot always be accurately predicted. The 2020 Census in fact showed that between 2010 and 2020, Newburyport grew 5 percent. With associated household growth and high demand for housing in the region, development is likely to continue. Major development activity completed, in construction or planning since the 2016 plan update includes:

Table 3.7.1 Major Developments				
Project Name/Location	Project Type	Status	Total Housing Units/Sq.Ft.	
	76 units / multi-family /			
1 Boston Way (40R)	live-work	Constructed	84 units / live-work	
100 Hale Street	Industrial expansion	Constructed	87,956 sq.ft.	
146-148 Merrimac Street	Multi-family residential	Constructed	4 units	
151 High Street	Multi-family residential	Constructed	10 units	
17 Malcolm Hoyt Road	Industrial Expansion	Constructed	19,087 sq.ft.	
18 Boyd Drive and 5 Brown Avenue (OSRD)	OSRD Subdivision	Constructed	38 units	
Low Street at Colby Farm Lane (OSRD)	OSRD Subdivision	Constructed	15 units	
2 Parker Street and 151-155 State Street	Multi-family residential	Partially Constructed	23 units	
23 Hale Street	Industrial Space	Constructed	11,700 sq.ft.	
25 Highland Avenue	Hospital Expansion	Under Construction	11000 sq.ft.	
2-6 Market Street	Multi-family / mixed use	Under Construction	5 units /8,000 sq.ft.	
3 Boston Way (40R)	84 units / multi-family / live-work	Under Construction	84 units / live-work	

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		Under	
3 Perkins Way	Industrial Expansion	Construction	40,000 sq.ft.
3 Stanley Tucker Drive	Industrial Expansion	Complete	9,688 sq.ft.
Hillside Ave. and			
Cottage Court		Partially	
("Hillside")	Multi-family residential	Constructed	48 units
		Under	
6 Perkins Way	Industrial space	Construction	30,000 sq.ft.
			<i>(</i>
75 Parker Street	Industrial Expansion	Permitted	8,300 sq.ft.
	Mixed use / office /		
77-79 Parker Street	event space	Permitted	23,400 sq.ft.
77R, 85 & 85R Storey	Assisted living / 49 new		
Avenue	rooms	Constructed	49 rooms / assisted living
Colby Farm Lane		Under	
(OSRD)	OSRD Subdivision	Construction	10 units
83 Merrimac (Parking			
Garage)	Public parking garage	Constructed	27,400 sq.ft.
	New medical office		
20 Henry Graf Jr. Road	building	Constructed	20,000 sq.ft.

To characterize any change in Newburyport's vulnerability associated with new developments as shown above, a GIS mapping analysis was conducted which overlaid

the development sites with the FEMA Flood Insurance Rate Map. All new development, except for 77-79 Parker Street (industrial expansion) is located outside of the FEMA designated 100-year and 500-year floodplains. All structures on the Parker Street industrial property are outside the flood hazard area. However, as noted in Section 4 of this plan, Newburyport's Business Park (west of Route 1 and south of Low Street) is in a low-lying area of the Parker River watershed and drainage issues and extreme precipitation



have caused flooding beyond the FEMA flood zones. This increased vulnerability will be addressed in the upcoming sections of this plan.

In addition, continued improvements and expansion of structures on Plum Island are of particular concern to the city due to the barrier island's vulnerability to current and future natural and climate related hazards. Considering current climate projections, Newburyport's Climate Resiliency Plan identifies a need to review, evaluate, and revise Plum Island zoning and regulations to guide development such that it promotes barrier island stability thereby delaying barrier island migration and protecting the Plum Island beach resource. These vulnerabilities and actions will be discussed in the upcoming sections of this plan.

Overall, future development in Newburyport requires guidance relative to the risk of developing in, or near, a floodplain. While many parts of the city are vulnerable to flooding

due to river influences, sea level rise, and storm surge, the areas differ enough from one another such that the three variables contributing to flooding will not contribute equally within each neighborhood. With proper precaution and guidance regarding flood risk during development, vulnerability is not likely to increase drastically. Given that the majority of Newburyport's planned future development lies outside of the floodplain, and those which do, namely the business park, are receiving special attention relative to flood prevention, these precautionary measures are being taken and will in turn mitigate new development's impact on the City's vulnerability.

3.8 Critical Infrastructure

In preparing for the workshops, the Newburyport Core Team reviewed and updated a database of the community's critical facilities and infrastructure. These facilities are vital to the delivery of key government services and may significantly impact the public during a time of emergency or while recovering from an emergency. The primary sources of information relative to the critical facilities were Newburyport Emergency Management, Fire, Police, and Public Services personnel on the Core Team. Some of these facilities have emergency backup generators and might be logical choices for emergency shelter locations. However, in the two schools with backup generators, Knock Middle School and Bresnahan Elementary School, the generators only power a portion of the buildings and therefore aren't sufficient for these buildings to be used for sheltering capacity. The only facility adequate for emergency shelter, the Salvation Army building, is not owned by the city. Additional facilities with backup generators are identified on the table below. Critical infrastructure located in a flood hazard area, as determined by review of the most recent FEMA Flood Insurance Rate Maps, is also identified.

Table 3.8.1 Newburyport Critical Infrastructure			
Name	Туре	FEMA Flood Zone (100/500)	Facility has Backup Generator
Newburyport Post Office	POST OFFICE	N	*
Newburyport Superior Court	COURT	Ν	*
MBTA Newburyport Commuter Rail	TRANSPORTATION HUB	Ν	*
Newburyport Society for Aged Men	NURSING HOME	Ν	*
Port Healthcare Center	NURSING HOME	N	Y
Brigham Manor and Rehab Center	NURSING HOME	N	Y
Country Rehabilitation and Nursing Ctr	NURSING HOME	Ν	Y

Atria Merrimack Place	ASSISTED LIVING FACILITY	N	*
Anna Jaques Hospital	HOSPITAL	N	Y
Newburyport City Hall	CITY/TOWN OFFICES	N	Ν
Newburyport High School	SCHOOL	N	Y
Rupert A. Nock Middle School	SCHOOL	N	Y
Kelley School Youth Center	YOUTH CENTER	N	Ν
Edward G. Molin Elementary	SCHOOL	N	Y
Francis T. Bresnahan Elementary	SCHOOL	N	Y
River Valley Charter School	SCHOOL	N	N
Newburyport Montessori	SCHOOL	N	N
Immaculate Conception	SCHOOL	N	Ν
Newburyport Senior Center	SENIOR CENTER	N	Y**
Newburyport Police Department	POLICE STATION	N	Y
Public Safety Building Plum Island	POLICE STATION	Y	N
Harbormaster/Visitor Boating Facility	HARBORMASTER	N	N
US Coast Guard Station		Y	Y
Historical Society of Old Newbury Library	LIBRARY	N	N
Newburyport Public Library	LIBRARY	N	N
Rogers Medical Library	LIBRARY	N	*
South End Library	LIBRARY	N	N
Newburyport District Court	COURT	N	*
Newburyport Juvenile Court	COURT	N	*
Newburyport Fire Department Headquarters	FIRE STATION	N	Y
West End Fire Station	FIRE STATION	N	Y
Emergency Management Headquarters 1 – DPS Admin. Bldg, Perry Way	EMERGENCY OPERATIONS CENTER	N	Y

Emergency Management Headquarters 2 – NFD Greenleaf Street	EMERGENCY OPERATIONS CENTER	N	Y
Salvation Army	EMERGENCY SHELTER	N	Y
Graf Ice Rink	EMERGENCY MORGUE	N	*
National Guard Armory	EMERGENCY OPERATIONS	N	Y
Public Works Facility	CITY/TOWN OFFICES	N	Y
DPS Administration Building	CITY/TOWN OFFICES	N	Y
Recycling Facility and DPW Storage	PUBLIC SERVICES	N	N
Wastewater Treatment Plant	WASTEWATER TREATMENT	Y	Y* **
Plum Island Vacuum Pump Station	SEWAGE LIFT STATION	Y	Y
Duffy Drive Pump Station	SEWAGE LIFT STATION	N	Y
Coke Plant Pump Station	SEWAGE LIFT STATION	N	Y
Crow Lane Pump Station	SEWAGE LIFT STATION	N	Y
Garrison Ave Pump Station	SEWAGE LIFT STATION	N	Y
Gould Pump Station	SEWAGE LIFT STATION	N	Y
Graf Road Pump Station	SEWAGE LIFT STATION	N	Y
Hale Street Pump Station	SEWAGE LIFT STATION	N	Y
Hiltons Lift Station	SEWAGE LIFT STATION	Y	N* ***
Laurel Road Station	SEWAGE LIFT STATION	N	Y
Lower Artichoke Reservoir	WATER	Y	N A
Upper Artichoke Reservoir	WATER	Y	N A
Indian Hill Reservoir	WATER	N	N A
Bartlett Pond Reservoir	WATER	N	Y

Water Filtration Plant	WATER	N	Y
Artichoke Reservoir Pump Station	WATER	N	Y
Marches Hill Water Tank	WATER STORAGE	N	N
Rawson Hill Water Tank	WATER STORAGE	N	A N
Oleo Woods Pump Station	SEWAGE LIFT STATION	N	A Y
Savory Street Pump Station	SEWAGE LIFT STATION	N	N* ***
Scotland Road Pump Station	SEWAGE LIFT STATION	N	Y
Storey Avenue Pump Station	SEWAGE LIFT STATION	N	Y
Water Street Pump Station	SEWAGE LIFT STATION	Y	Y
Whites Court Pump Station	SEWAGE LIFT STATION	Y	N* ***
#1 Well	WELL FIELDS	N	Y
#2 Well	WELL FIELDS	N	Y
National Grid Substation	UTILITY	N	Ν
Kindercare Learning Center #658	DAY CARE FACILITIES	N	*
Knoll Edge Nursery School	DAY CARE FACILITIES	N	Ν
Newburyport Montessori School Inc.	DAY CARE FACILITIES	N	Ν
Community Action, Inc. Headstart At Newburyport	DAY CARE FACILITIES	N	Y
Knoll-Edge Preschool	DAY CARE FACILITIES	N	Ν
Mulberry Child Care and Preschool	DAY CARE FACILITIES	N	*
Children's House Bright Horizons	DAY CARE FACILITIES	N	*
School's Out Program/YWCA	DAY CARE FACILITIES/SCHOOL	N	*
Powder House	HISTORIC SITE	N	*
Custom House Maritime Museum	HISTORIC SITE	N	*

Custom House Museum Property	HISTORIC SITE	Y	*
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* Unknown

** Senior Center has a generator on-site ready to be installed. It is not hooked up yet.

*** WWTF generator has recently failed. A new one is on order ready to be delivered this fall. We have a portable generator on-site now until the permanent one is hooked up.

**** Pump station does not have a permanent backup generator but is wired to easily hookup a portable generator.

SECTION 4. NATURAL HAZARDS IDENTIFICATION

A. Natural Hazards Inventory

This section of the Hazard Mitigation Plan identifies and describes natural hazards that are likely to occur in the Merrimack Valley Region of Massachusetts and Merrimac in particular. A natural "hazard" is defined as "an event or physical condition that has the potential to cause fatalities, injuries, property damage, infrastructure damage, and agricultural loss, damage to the environment, interruption of business or other types of harm and loss". Natural hazards are inevitable, but the impacts of natural hazards can, at a minimum, be mitigated or, in some instances, prevented entirely. However, natural hazard impacts can also be exacerbated by societal behavior and practices, such as building in a floodplain or on a barrier beach.

Hazard identification details the geographic extent, the significance, and the probability of a particular natural hazard affecting a region, based on historical records and other information available from local, state, and federal sources. The identification includes an assessment of risks, to provide communities with information needed to prioritize mitigation strategies.

The State Hazard Mitigation and Climate Adaptation Plan identifies 11 natural hazards that are likely to affect the Commonwealth. These include:

Coastal Erosion 🛛 Landslide 🗋 Dam Failure 🖾 Nor'easter 🖓 Earthquake 🗠 Severe Weather

Natural hazards that are likely to occur in the Merrimack Valley region, and documented in the 2016 Merrimack Valley Regional Multi-Hazard Mitigation Plan Update, were grouped – in order of frequency – in the following seven categories:

- Flood-related hazards
- Wind-related hazards
- Winter-related hazards
- Fire-related hazards
- Geologic hazards
- Heatwaves/extreme heat
- Climate change/sea level rise

44 CFR Requirement

Part 201.6(c)(2)(i): The risk assessment shall include a description of the type, location, and extent of all natural hazards that can affect the jurisdiction. The plan shall include information on previous occurrences of hazard events and on the probability of future occurrences.

It is important to note that the above hazard categories are not always mutually exclusive. Indeed, they are often interrelated. For example, flooding can be the result of a hurricane, a nor'easter, a thunderstorm, or a winter storm. Similarly, tornadoes can be spawned by, and accompany hurricanes. Also, the geographic extent and the impacts of the hazards can vary widely. Some hazards, such as severe winter storms, may impact a large area yet cause little damage, while other hazards, such as tornadoes, may impact a small area yet cause catastrophic damage.

During Newburyport's MVP Planning process, workshop participants came to consensus that the following climate-change related hazards were the highest priority for Newburyport: Storms including nor'easters, winter storms, and hurricanes (wind, snow, rain, storm surge) Bipolar Weather (including extreme cold, extreme heat, drought, and extreme fluctuations) Inland Flooding (precipitation) Sea Level Rise.

The following discussion describes the natural hazards that affect the Merrimack Valley region and the City of Newburyport, including their historical presence and probability of recurrence incorporating the likely impacts of climate change on each hazard.

4.1 Flood-Related Hazards

As is the case nationally and throughout New England, floods are the Merrimack Valley region's most frequent and costly natural disaster in terms of human hardship and economic loss. Flooding is generally the direct result of moderate to severe weather events such as coastal storms ("nor'easters"), heavy rainstorms, and hurricanes. Total annual precipitation at the century's end is projected to increase by as much as 18% above the 1971-2000 baseline of 45", with most high precipitation events concentrated in the winter and spring months. Increased frequency of high-intensity events, the Northeast experiencing a 71% increase in precipitation during storms.¹⁷ With extreme rainfall events becoming more frequent, the severe impacts from flooding are also likely to increase.

Flooding poses a significant, and recurring, risk to life and property in the Valley region. Three types of flooding typically affect the region: *riverine* flooding, *coastal* flooding, and *urban* (stormwater) flooding. Also, there are scattered low-lying wetland areas that have the potential to flood. According to the National Climatic Data Center, sixty-seven (67) flood events were reported in Essex County from January 1, 1950, to April 30, 2020. While the Merrimack River is generally prone to minor flooding, on May 15, 2006, rainfall raised the river to more than 8 feet (2.4 m) above flood stage, forcing evacuations and damaging property. Reports of total rainfall vary, but most areas appear to have received around a foot of rain, with some areas, in the Merrimack Valley, receiving as much as 17 inches. According to the Boston Globe, around 1,500 people evacuated their homes to escape the flood.

The most significant flood in the recorded history of the Merrimack River was in March 1936, when rain, melting snow and ice swelled the Merrimack in Lowell to 68.4 feet (20.8 m), 10 feet (3 m) higher than the 2006 flood. Upstream in Methuen, Lawrence, North Andover, Haverhill, and other riverfront communities, densely developed downtown centers and riverfront neighborhoods were devastated by the floodwaters. In addition to the 1936 flood, the 1852 flood, the Mother's Day Flood of 2006, the New England

¹⁷ University of Massachusetts Amherst. 2018. National Climate Science Center Climate Change Projections <u>http://www.resilientma.org/resources/resource::2152</u>

Hurricane of 1938, and the Patriots Day Flood of April 2007 are among the region's most serious flood events. Most recently, from March 14 through 21, 2010, a major rain event caused several local rivers and streams to reach or exceed flood stage. Table 4.1.1 below lists all flood events in Essex County between 1958 and 2019.

Location	County/Zone	Date	Deaths	Injuries	Property Damage
Totals:			2	3	20.712M
WESTERN ESSEX (ZONE)	WESTERN ESSEX (ZONE)	06/17/1998	0	0	0.00K
WESTERN ESSEX (ZONE)	WESTERN ESSEX (ZONE)	06/18/1998	0	0	0.00K
EASTERN ESSEX (ZONE)	EASTERN ESSEX (ZONE)	03/05/2001	0	0	0.00K
WESTERN ESSEX (ZONE)	WESTERN ESSEX (ZONE)	04/03/2004	0	0	0.00K
WESTERN ESSEX (ZONE)	WESTERN ESSEX (ZONE)	04/03/2004	0	0	0.00K
EASTERN ESSEX (ZONE)	EASTERN ESSEX (ZONE)	10/15/2005	0	0	50.00K
EASTERN ESSEX (ZONE)	EASTERN ESSEX (ZONE)	10/25/2005	0	0	45.00K
COUNTYWIDE	ESSEX CO.	05/13/2006	2	0	7.000M
COUNTYWIDE	ESSEX CO.	05/13/2006	0	0	0.00K
LYNN PEABODY	ESSEX CO.	07/11/2006	0	0	10.00K
PEABODY	ESSEX CO.	07/28/2006	0	0	20.00K
HAVERHILL	ESSEX CO.	03/02/2007	0	0	20.00K
HAVERHILL	ESSEX CO.	04/16/2007	0	0	45.00K
LITTLE NAHANT	ESSEX CO.	02/13/2008	0	0	30.00K
SALEM	ESSEX CO.	03/08/2008	0	0	0.00K
TAPLEYVILLE	ESSEX CO.	08/08/2008	0	0	25.00K
SOUTH ESSEX	ESSEX CO.	09/06/2008	0	0	5.00K
NEWBURY	ESSEX CO.	03/14/2010	0	1	9.800M
NEWBURY	ESSEX CO.	03/30/2010	0	2	3.270M
LYNN	ESSEX CO.	04/01/2010	0	0	0.00K
SALEM MARITIME NHS	ESSEX CO.	08/05/2010	0	0	7.00K
HAWTHORNE	ESSEX CO.	08/25/2010	0	0	0.00K
SOUTH LAWRENCE	ESSEX CO.	10/04/2011	0	0	0.00K
TOPSFIELD	ESSEX CO.	10/04/2011	0	0	5.00K
PEABODY	ESSEX CO.	10/04/2011	0	0	300.00K
SOUTH LYNNFIELD	ESSEX CO.	06/23/2012	0	0	0.00K
LYNN	ESSEX CO.	06/23/2012	0	0	0.00K
NORTH SAUGUS	ESSEX CO.	08/10/2012	0	0	0.00K
MARSH CORNER	ESSEX CO.	06/24/2013	0	0	5.00K
SALEM MARITIME NHS	ESSEX CO.	07/01/2013	0	0	0.00K
	ESSEX CO.	07/01/2013	0	0	0.00K

Table 4.1.1 Merrimack Valley Flood Events 1998 - 2020

RIVERVIEW	ESSEX CO.	07/01/2013	0	0	0.00K
SALEM MARITIME NHS	ESSEX CO.	07/27/2014	0	0	0.00K
LYNN COMMON	ESSEX CO.	10/23/2014	0	0	30.00K
METHUEN	ESSEX CO.	10/23/2014	0	0	0.00K
	ESSEX CO.	10/23/2014	0	0	0.00K 0.00K
(BVY)BEVERLY MUNI AR PEABODY		12/09/2014		0	0.00K 0.00K
SOUTH MIDDLETON	ESSEX CO.	12/09/2014	0		0.00K 0.00K
ROOTY PLAIN	ESSEX CO.	12/09/2014	0	0	0.00K 0.00K
SALEM MARITIME NHS	ESSEX CO.	12/09/2014		0 0	
	ESSEX CO.		0		0.00K
TOZIER CORNER	ESSEX CO.	08/18/2015	0	0	0.00K
EAST SAUGUS	ESSEX CO.	08/18/2015	0	0	0.00K
CARLETONVILLE	ESSEX CO.	09/30/2015	0	0	0.00K
	ESSEX CO.	06/29/2016	0	0	0.00K
WEST ANDOVER	ESSEX CO.	04/06/2017	0	0	0.00K
	ESSEX CO.	06/27/2017	0	0	1.00K
SOUTH MIDDLETON	ESSEX CO.	06/27/2017	0	0	1.00K
HAWTHORNE	ESSEX CO.	07/08/2017	0	0	0.00K
SOUTH GROVELAND	ESSEX CO.	07/18/2017	0	0	0.00K
LAWRENCE	ESSEX CO.	09/06/2017	0	0	0.00K
LAWRENCE	ESSEX CO.	09/06/2017	0	0	0.00K
SOUTH LAWRENCE	ESSEX CO.	09/15/2017	0	0	10.00K
CARLETONVILLE	ESSEX CO.	09/30/2017	0	0	4.00K
TAPLEYVILLE	ESSEX CO.	10/25/2017	0	0	0.00K
RIVERVIEW	ESSEX CO.	10/25/2017	0	0	0.00K
DANVERS	ESSEX CO.	01/13/2018	0	0	5.00K
LAWRENCE	ESSEX CO.	08/11/2018	0	0	10.00K
DEVEREUX	ESSEX CO.	08/12/2018	0	0	0.00K
MIDDLETON	ESSEX CO.	11/03/2018	0	0	0.00K
SOUTH LAWRENCE	ESSEX CO.	11/03/2018	0	0	0.00K
WEST ANDOVER	ESSEX CO.	04/15/2019	0	0	0.00K
EAST SAUGUS	ESSEX CO.	07/31/2019	0	0	3.00K
LYNN	ESSEX CO.	07/31/2019	0	0	0.00K
EAST LYNN	ESSEX CO.	09/02/2019	0	0	10.00K
COMMON PLUM	ESSEX CO.	09/02/2019	0	0	0.50K
IS ARPT	ESSEX CO.	07/13/2020	0	0	0.00K
GEORGETOWN	ESSEX CO.	07/23/2020	0	0	0.00K
NEWBURYPORT PLUM ARP	ESSEX CO.	07/23/2020	0	0	0.00K

BEVERLY	ESSEX CO.	07/23/2020	0	0	1.00K
BALLARDVALE	ESSEX CO.	07/23/2020	0	0	0.00k
WEST GLOUCESTER	ESSEX CO.	07/23/2020	0	0	0.00k
MIDDLETON	ESSEX CO.	09/10/2020	0	0	0.00k
BEVERLY	ESSEX CO.	09/10/2020	0	0	1.00k

Riverine floods are most likely to occur in Spring. They result from the "overbanking" of swollen rivers and streams and are typically caused by a large-scale weather event that generates an unusual amount of precipitation or by rapid snowmelt. *Coastal floods* commonly occur during the winter months and are the result of storm surges spawned by northeast coastal storms (Nor'easters). Packing sustained wind speeds of up to 40 miles per hour and wind gusts of up to 70 mph, these storms cause repeated wave and erosion-induced damage to structures and natural resources, such as beaches and dunes. In the Merrimack Valley region, the barrier beaches of Salisbury Beach and Plum Island are especially vulnerable to coastal storms, and sustain frequent wind, wave, and flood damage. *Urban (stormwater) floods* may occur year-round and are caused by inadequate stormwater drainage in areas with a high percentage of impervious surface (rooftops, roads, parking lots, etc.) that prevents groundwater infiltration. Flooded roadways and basements often result from this type of flood event.

Floodwaters can be extremely dangerous, as the force of six inches of rapidly moving water can knock people off their feet. Flash flood waters move very quickly and often happen unexpectedly. Flash floods usually result from an intense storm, typically a thunderstorm, that dumps a large amount of rainfall over a short period. Flash floods can destroy buildings and obliterate bridges. Around the country, most flood deaths are due to flash floods, and nearly half of all flash flood deaths are auto related.

Methodology

Flood hazard identification is the first phase of flood hazard assessment. Identification is the process of estimating the geographic extent of the floodplain. The intensity of flooding that can be expected in specific locations, and the probability of occurrence of flood events.

The methodology for assessing the hazard presented by flooding involved mapping the FEMA Flood Insurance Rate Maps as an overlay to Newburyport's critical infrastructure. Additionally, repetitive loss structures were



identified based on records from the National Flood Insurance Program (NFIP). Vulnerable critical facilities and infrastructure, including dams and bridges, were then mapped in relation to their proximity to rivers, streams, and flood-prone areas. Definitions of the various flood hazard areas/zones for Newburyport are as follows:

Zone A - Areas subject to inundation by the 1-percent-annual-chance flood event generally determined using approximate methodologies. Because detailed hydraulic analyses have not been performed, no Base Flood Elevations (BFEs) or flood depths are shown. Mandatory flood insurance purchase requirements and floodplain management standards apply. Some A Zones in coastal areas are likely to be subject to moving water, overwash, breaking waves (with heights less than 3 feet), storm surge, and wave runup (with depths less than 3 feet)—all of which may cause erosion and scour.

Zone AE - Areas subject to inundation by the 1-percent-annual chance-flood event determined by detailed methods. Base Flood Elevations are shown. Mandatory flood insurance purchase requirements and floodplain management standards apply.

AO-Zones are those portions of Land Subject to Coastal Storm Flowage (LSCSF) which are subject to inundation by moving water (usually sheet flow on sloping terrain) where average depths are between one and three feet. In Massachusetts, coastal AO-zones are commonly associated with 'overwash' and generally border on the landward side of V-zones.

Zone X - An area of moderate flood hazard that is determined to be outside the Special Flood Hazard Area between the limits of the base flood and the 0.2-percent-annual-chance (or 500-year) flood.

Velocity Zones (including V-, VE-, and Va-30) – Those portions LSCSF of which are coastal high hazard areas or areas of special flood hazard extending from the mean low water line to the inland limit within the 100-year floodplain that have been determined by FEMA to wave run heights in excess of three feet or subject to high-velocity wave run-up or wave-induced erosion

National Flood Insurance Program

The National Flood Insurance Program (NFIP) is a federal program, administered by FEMA. The NFIP provides subsidized flood insurance within communities that agree to adopt corrective and preventative floodplain management regulations that will reduce future flood damages. Congress created the NFIP in 1968, with the passing of the National Flood Insurance Act. The Act was passed to benefit homeowners whose insurance does not cover flood damage. In general, flood insurance from private companies is either not available or extremely expensive. NFIP flood insurance is available anywhere within a participating community, regardless of the flood zone in which a property is located. Federal law requires that flood insurance be purchased as a condition of federally insured financing used for the purchase of buildings in the Special Flood Hazard Area (SFHA).

FEMA produces Flood Insurance Rate Maps, commonly known as FIRMs, to support the National Flood Insurance Program. The FIRMs depict SFHAs, including the areas subject to inundation from the 1% annual chance flood (also known as the Base Flood or the

100-Year Flood). The SFHA determines where flood insurance is required as a condition of a federally insured loan through the NFIP mandatory purchase requirement. This requirement is intended to shift flood damage and recovery costs away from the general taxpayer and on to those who live in floodplains. The risk zones and flood elevations shown on the FIRMs within the SFHA are used to determine flood insurance rates.

The SFHA also determines where NFIP floodplain management requirements must be enforced by communities that participate in the program. These include land use and building code standards. In addition to the NFIP, the FIRMs are also used within FEMA's Individual and Public Disaster Assistance programs and FEMA's Mitigation Grant Programs, in emergency management, and they are also used to identify areas where certain State Building Code and Wetland Protection regulations must be enforced. Massachusetts State Building Code covers the entire state, applies to both public and private construction, and is administered through the local building inspectors with state oversight. Section 3107 of the State Building Code contains most of the construction requirements related to buildings or structures.

In 2010, and again in 2012, 2014, and 2018 new FEMA floodplain maps were released for the communities located in the Merrimack Valley region. The most current FIRM maps for Newburyport are dated July 19, 2018.

It is important to note that the term "100-year flood" is misleading. It is not a flood that will occur only once every 100 years. Rather, it is a flood that has a one percent chance of being equaled or exceeded each year. Thus, the 100-year flood could occur more than once in a relatively short period of time. The 100-year flood, which is the standard used by most federal and state agencies, is used by the National Flood Insurance Program (NFIP) as the standard for floodplain management and to determine the need for flood insurance. A structure located within a Special Flood Hazard Area (SFHA) shown on an NFIP map has a 26 percent chance of suffering flood damage during the term of a 30- year mortgage.

Community Rating System

The Community Rating System (CRS) is part of the NFIP. The CRS program encourages communities to reduce their flood risk by engaging in floodplain management activities. CRS provides discounts on flood insurance for communities that establish floodplain management programs that go beyond the minimum requirements of the NFIP. Depending on the level of activities that communities undertake in four areas – public information, mapping, and regulatory activities, flood damage reduction, and flood preparedness - communities are categorized into 1 to 10 CRS classes. A Class 1 rating provides the largest flood insurance premium reduction, while a community with a Class 10 rating receives no insurance.

Although communities are not required to participate in CRS to receive approval of a hazard mitigation plan, FEMA encourages jurisdictions to integrate the CRS planning steps in their multi-hazard mitigation plans.

NFIP and Repetitive Loss Structures

Newburyport participates in the National Flood Insurance Program (NFIP). This Federal program, administered by FEMA, allows property owners in participating communities to obtain flood insurance to protect against flood losses and recover more quickly following an event. To participate, communities must adopt and enforce floodplain management regulations to mitigate future flood damage.

According to the most recent data provided by the Massachusetts Flood Hazard Management Program (FHMP), Newburyport has 530 policies in force, insuring over \$154 million in buildings and contents. Over the years, flood damage to these structures has resulted in the payment of nearly \$2.9 million in insurance claims under the National Flood Insurance Program (NFIP).

According to FEMA and the NFIP, Repetitive Loss Properties are properties that have received flood insurance claim payments greater than \$1,000 twice in any 10-year period years since 1978. There are currently 19 repetitive loss properties in Newburyport. Seventeen (17) of them are single-family residences. One is identified as a non-residential business and another as "other" non-residential. For these 19 properties, there have been a total of 49 losses totaling \$745,009.27 in payments.

Table 4.1.2 Summary of Repetitive Loss Properties Newburyport					
	Total				
RL Properties (Total)	19				
RL Properties (Insured)	7				
RL Losses (Total)	49				
RL Losses (Insured)	20				
RL Payments (Total)	\$745,009.27				
Building	\$636,733.99				
Contents	\$108,275.28				
RL Payments (Insured)	\$511,758.04				
Building	\$47,196.17				
Contents	\$40,562.87				

Source: MA Department of Conservation and Recreation, data as of 01/28/2020

Newburyport is located at the mouth of the Merrimack River at its confluence with the Atlantic Ocean and includes a portion of a barrier island, Plum Island. This geography coupled with sea level rise, climate enhanced storm activity, and more frequent heavy precipitation events, makes flooding the most recognized hazard in the community. According to the State Hazard Mitigation and Climate Adaptation Plan, the

Commonwealth experiences a substantial flood event once every three years. For Newburyport flooding is very much a short and long-term hazard.

Flood Prone Areas

Newburyport is a city of three watersheds: the Merrimack, the Little River and the Artichoke. The Merrimack River flows alongside Newburyport downtown before draining into the Atlantic. As the Merrimack approaches the western boundary of the City, it meets the Artichoke River, source of public drinking water supply for Newburyport and West Newbury. The headwaters of the Little River are by Route 95 north of Hale Street. The main branch meanders along the Old Route 95 roadbed. The western tributaries include



streams that originate behind the shopping centers on Storey Avenue. The Little River flows south through Newbury and enters the Parker River, which along with the Ipswich and Rowley rivers are freshwater sources entering into Plum Island Sound, part of the Great Marsh ecosystem designated an Area of Critical Environmental Concern (ACEC).

Because Newburyport is both a water-rich and a low-lying coastal community, significant portions of it are located in flood hazard zones and thus are susceptible to flooding. This is especially the case when high river flows from heavy rains coincide with high ocean tides. When high winds from the northeast and east are added to this mix, the effects can be truly devastating. Nowhere has this been more evident than on Plum Island, where storm surges have eroded large swaths of beach frontage and seriously damaged or destroyed a number of ocean-side structures.

Significant parts of Newburyport lie within the floodplains of the Merrimack, Little, and Artichoke Rivers. A GIS analysis of the city's FIRM flood hazard areas by MVPC has determined that a total of 1,517 acres (2.37 sq. mi.) of land area in Newburyport is located within the 100-Year floodplain and thus is vulnerable to flooding. An additional 93.7 acres (0.15 sq. mi.) lies within the 500-Year floodplain. Together, these two flood zones constitute 24% of the total area of the community which is a large proportion of land in Newburyport located in a flood hazard area.

Newburyport's Climate Resiliency Plan stresses that neighborhoods within the city are vulnerable to flooding due to a variety of influences, including river, sea level rise, and storm surge. Dividing the city into regions of vulnerability subject to the types of flooding they experience allows City officials to fine tune risk, adaptation strategies, and zoning efforts that will guide the mitigation process. The following figure is taken from the Climate Resiliency Plan:

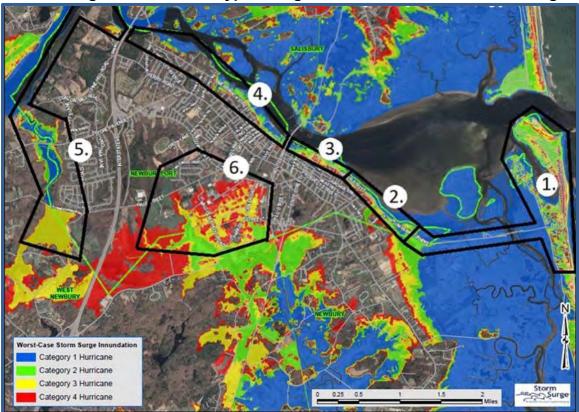


Figure 4.1.1 Newburyport Neighborhoods Vulnerable to flooding

- 1. Plum Island and the Plum Island Turnpike
- 2. Joppa to the National Grid Substation
- 3. The National Grid Substation to the Route 1 Bridge Downtown and Waterfront
- 4. The Route 1 Gillis Bridge to the I-95 Bridge Cashman Park and Merrimac St.
- 5. The Surface Water Reservoirs (Critical Asset already discussed)
- 6. The Little River Watershed including the Business Park

The prior MVHMP identified several areas of special concern. The following list from the 2016 MVHMP has remained the same. Additional details have been added to highlight more specific issues of the more vulnerable areas.

SPECIAL FLOOD HAZARD CONCERNS

- 1. Plum Island & Beach erosion
- 2. Plum Island Turnpike roadway flooding, ice cakes, high winds, zero visibility
- 3. Plum Island Center overtopping, flooding
- Newburyport Turnpike flooding north of Ould Newbury Golf Course during astronomical high tide and hurricane storm surge
- 5. Cashman Park, Downtown Waterfront,-high tide flooding and storm surge
- 6. Hale Street Flooding/Inadequate infrastructure
- 7. Fox Run Road Localized Flooding/inadequate infrastructure
- 8. Henry Graf Road Flooding
- 9. Business Park at Malcolm Hoyt Road Flooding and inadequate infrastructure
- 10. Merrimac Street Localized Flooding
- 11. Ocean Avenue High Tide Flooding and storm surge
- 12. Parker Street at Scotland Road Flooding/inadequate infrastructure
- 13. Quail Run Hollow Localized flooding
- 14. Downtown State Street/Market Square Major flooding, aged infrastructure.

First on this list is Plum Island. Plum Island is an 11-mile barrier beach, most of which falls outside the city's boundaries. However, the far northern tip of the island is in Newburyport and is densely populated with vacation homes and year-round residences. This portion of Newburyport has extremely high exposure to coastal flooding and erosion. Beginning on March 3rd, 2018, the region was impacted by the first of four significant storm systems that rode in atop of a nearly 10-foot tide. Adding in a 2-3-foot storm surge resulted in a 12-13 foot storm tide (7.6- 8.6 feet NAVD88). Aside



Water Table Ponding March 2018 – Source: Climate Resiliencv Plan 2020

from flooding the Plum Island turnpike, Old Point Road, and Sunset Boulevard, the combined level of the sea to the east and the river to the west, forced the water table under Plum Island to the surface to form ponds between dunes, streets and homes. This ponding was not the result of rainfall.



Aside from travel by boat, there is only one way to and from Plum Island which is via the roughly 2-mile-long, two lane, flat and exposed Plum Island turnpike, and its Bascule draw bridge over the Plum Island River. In 2016, on average some 11,846 vehicles traversed the turnpike bridge daily (Source: MassDOT). The turnpike has historically flooded during storms and was impassable during and after the Blizzard of '78 as it had been flooded and littered with giant ice cakes. When the draw bridge was constructed in 1973, the causeway's approach to the bridge was elevated to accommodate

the structure's height, but the balance of the roadway is low and increasingly today

becoming impassable during significant storm events due to flooding, river ice intrusion and blowing and drifting snow. Though infrequent and more often a vulnerability during the boating season, the draw bridge has broken down in its raised position cutting off access to the island for upwards of 6 hours.

Another area of flooding concern is the 550-acre Business Park area, built on low-lying former farmland within the Parker River watershed. Several of the sixty industrial and manufacturing facilities there have hazardous materials on site and are vulnerable to flooding. During the May 2006 flood, all six entrances into the Business Park area were inaccessible, not only creating private business losses, but also shutting down critical routes of egress and emergency vehicle access.



In 2020, the City redesigned Malcolm Hoyt Drive in

order to raise it and install a larger cross-culvert in order to improve runoff from larger storm events. However, bids for the project came in too high, and the city could not fund the entire amount. The city repaved the road and raised it slightly to be less prone to flooding. However, funding did not allow replace the culvert. As seas continue to rise, this and a few other roads will need to be raised again and culverts replaced with larger structures.

The *Newburyport Climate Resiliency Plan* details the different flooding influences in each area shown in Figure 4.1.1 and outlines vulnerable structures and identifies current as well as future flood risk. This information guided the Newburyport Resiliency Committee in choosing the priority actions to mitigate hazards and improve resiliency found in Section 8.

Coastal Erosion/Shoreline Change

Coastal shoreline change is a natural and anticipated phenomenon. Numerous factors such as wind, waves, storms, sea level, seasonal and climatic cycles, and anthropogenic activity may all influence shifts in coastal shorelines. Patterns of erosion and accretion can be expected and tracked, such as loss during winter months due to sediment removal by high-energy waves and gain during summer months due to low energy wave deposits. Outside of these normal fluctuations, more extreme shoreline change can occur due to the convergence of natural factors (i.e. storm events), human intervention (i.e. coastal armoring), or a combination of both.

Coastal erosion is defined as the loss or displacement of land or sediment along a coastline and is frequently reported as an average annual erosion rate (loss in feet or meters per year). The <u>2018 Massachusetts State Hazard Mitigation and Climate Adaptation Plan</u> identifies a number of factors that determine location-specific erosion/accretion rates:

- Frequency and severity of high-energy storms
- Surrounding sediment size and composition
- Local bathymetry
- Variations in alongshore wave energy and local sediment transport rates
- Sea-level rise levels
- Exposure to significant storm waves
- Anthropogenic intervention/structural development



Figure 4.1.2 Coastal Erosion in Newburyport. Photo credit: Sandy Tilton, Great Marsh Coastal Adaptation Plan (2017).

Hazard Location: Sections of Newburyport along the barrier beach system of Plum Island have and continue to experience significant shoreline change and coastal erosion. Patterns of erosion and accretion have been noted since the 1800s by the US Army Corps of Engineers, with in-depth morphological studies beginning in the 1940s, and more regular monitoring starting with the emergence of remote sensing and other surveying techniques in the 1990s.¹⁸ Historically, the shoreline along Plum Island beach has remained relatively stable, with long-term erosion rates averaging 0.3 +/-2.0 ft/year; however cycles of acute and intense erosion and accretion have been observed and recorded since the 1960s.¹⁹ Since recorded observations began, shoreline change has occurred across the barrier

 ¹⁸ MA Department of Conservation & Recreation (2021). Upper North Shore Regional Sediment Management Study.
 ¹⁹ MA Department of Conservation & Recreation (2021). Upper North Shore Regional Sediment Management Study.

beach system from Newburyport to Ipswich, with different locations experiencing acute erosion/accretion depending on the given dynamics in a particular year (such as Reservation Terrace and the Center Island Groin). Because Plum Island acts as the first line of defense against storm surges and sea level rise, understanding patterns of shoreline change and protecting natural barrier beach systems that act as buffers for coastal communities is critically important. Beachfront ownership across Plum Island ranges from private to public with parcels owned at the town, state, and federal level. The Merrimack River inlet at the North of Plum Island is federally maintained and repaired periodically by the US Army Corps of Engineers (USACE). Due to the broad range of stakeholders involved and invested in Plum Island, monitoring and management of this system must be a collaborative process.



Figure 4.1.3 Map of the north and south jetties at the mouth of the Merrimack River with historic coastal edge data from 1909-2009. Source: Coastal Zone Management Massachusetts Shoreline Change Project.

Previous Occurrences and Severity: Human-constructed features across Plum Island have been found to influence patterns of accretion and erosion along the barrier beach system. Recently, acute erosion has been noted along the northern edge of Plum Island, at Reservation Terrace. Due to the concern around loss at this location, a focus is given to address current conditions and efforts being made along Reservation Terrace, however it should be noted that this is not the only location along Plum Island that has historically experienced acute loss. Originally constructed in 1914 to improve the navigability of the channel, the Merrimack River Inlet jetties have been rehabilitated numerus times, only to degrade as storms erode sediment along the toe of the structure.²⁰ Most recently, work to repair the jetties was undertaken in 2012 following a breach of the system. The South jetty repair in Newburyport was completed in 2014 and the North jetty on the Salisbury side of the channel was completed in 2015. This was the ninth time repairs had been made to the jetty system.²⁰ Since the most recent repair, residents have noticed a significant increase in erosion along the northern tip of Plum Island at the Reservation Terrace and Old Point neighborhoods, estimated by the Army Corps of Engineers at 53 feet of loss per year.²¹

Erosion of this magnitude poses a significant threat to residents on Plum Island and further degrades the capacity of dunes and beaches to protect properties from natural events and the impacts of climate change (storms, tidal surge, sea level rise, etc.). Over the past several decades, significant nor'easters and other storm events have caused acute beach erosion, prompting emergency shoreline protection and response efforts (rock barriers, coir bags, beach nourishment, emergency road maintenance, water/sewer repair) from the City and local residents to protect dwellings, buildings and other infrastructure along Plum Island. While the efforts have provided some short-term protection to adjacent properties, they do not offer lasting protection and require regular maintenance. Therefore, understanding the dynamics of the hazard and developing long-term collaborative planning efforts are necessary to respond to ongoing shoreline change and erosion along the Plum Island system.

The extreme shoreline change observed by residents since the most recent jetty rehabilitation at the norther tip of Plum Island along Reservation Terrace is in line with historical trends observed at this location. Beach sediment along Reservation Terrace has alternated between accretional and erosive periods since the jetty was installed in the early 1900s and is largely caused by the jetty altering the Merrimack River's natural hydraulic flow.²⁰ Initially, as water moves into the river basin during a flood tide, the jetty restricts the flow, causing a circulation gyre to form within the inlet along Reservation Terrace (Figure 4.1.3). The currents created from the gyre are able to mobilize and transport sediment away from the shoreline. Once inside, the constricted river mouth acts as a funnel to hold the water within the river basin and marsh. During heavy storm events, precipitation and runoff coming down river overwhelms the system, and the river is unable to efficiently discharge the significant volume of water. The trapped water causes floods, which rise along the rear of the barrier beaches and along Newburyport's waterfront, where they exert substantial hydraulic pressure, pulling the suspended sand and sediment with it when water retreats.²²

While the construction and repair of the jetties was aimed at maintaining a navigable channel by managing the flow of water and sand out of the river, their presence has altered the distribution of sand moved by hydraulic forces. When historic aerial imagery and

 ²⁰ MA Department of Conservation & Recreation (2021). Upper North Shore Regional Sediment Management Study.
 ²¹ Army Corps of Engineers (2021). Section 204 Beneficial Use of Dredged Material FROM Federal Navigation Project Maintenance Detailed Project Report and Environmental Assessment.

²² National Wildlife Federation (2017). Great Marsh Coastal Adaptation Plan. https://www.nwf.org/-/media/Documents/PDFs/NWF-Reports/NWF-Report_Great-Marsh-Coastal-Adaptation-Plan_2017.ashx Newburyport Multi-Hazard Mitigation Plan 2022

shoreline change data is paired with a record of jetty repairs, a connection between beach erosion and the condition of the jetty can be made.²³

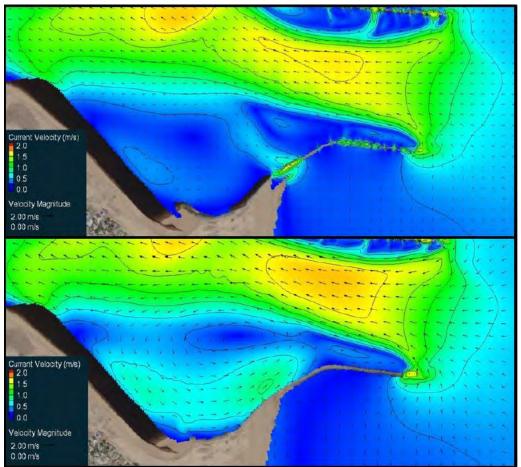


Figure 4.1.4 Coastal Modeling System Flow Results illustrating impact of jetty condition on flow within river basin. Top model represents flow when jetties are in disrepair vs. bottom model which represent flow when jetty system is repaired (source: DCR Upper North Shore Regional Sediment Management Study, 2021).

During periods of disrepair, Newburyport's coastal beach eroded while the beach on Plum Island Point, within the river, accreted. During periods of repair, the coastal beach accreted, while Plum Island Point eroded. This phenomenon can be explained by the movement of sand from the coastal beach into the river when the jetty is in disrepair, and conversely, the lack of available supply from the coastal beach when the jetty is repaired. During periods of jetty repair, the change in available sediment supply paired with the development of a circulation gyre leads to acute and significant coastal erosion and shoreline change. While the jetties have been found to significantly alter erosion and accretion rates, it should be noted that some portion of shoreline change at Plum Island Point and across the barrier beach system is due to factors outside of direct human

²³ Hein, C.J. et al. (2019). Shoreline Dynamics Along a Developed River Mouth Barrier Island: Multi-Decadal Cycles of Erosion and Event-Driven Mitigation. Frontiers 7:103

activities such as high wave energy and longshore currents which naturally shape barrier beach systems.²⁴

The use of gray infrastructure (such as jetties and seawalls) to combat coastal erosion is not unique to Newburyport. The 2015 Massachusetts Coastal Erosion Commission report found that 46% of the exposed coastline along the North Shore of Massachusetts is armored by some form of coastal engineered structure.²⁵ Armoring can successfully protect adjacent structures but can also lead to unintended long-term consequences due to the disturbance of natural systems, as experienced at Plum Island Point.

Due to the drastic erosion occurring along Plum Island, the city and the USACE have taken follow-up steps to conduct an additional assessment of the jetty design and impact, as well as dredging and remediation to key sites. The USACE 2021 detailed project report and environment assessment expands on this work. In the fall of 2022, an estimated 250,000 cubic yards of sand will be dredged from the channel to allow for safe navigation. Dredged material will be placed on the most severely eroded section of dune and beach at Plum Island Point, adjacent to Reservation Terrace. Historically, dredging was conducted by the USACE every 3-5 years from 1961-1999, but the frequency has decreased to every 10 years since that point.²⁶ Despite this effort, the USACE acknowledges in their assessment that benefits of the beachfill at Plum Island Point will only offer a temporary solution, with the lifespan of the beachfill estimated at 3-4 years at Plum Island Point. Further, the study states that "if more effective protective measures are not implemented, it is anticipated that long term erosion will continue at the current rate and continue to threaten the shorefront structures along Northern Boulevard and the sewer and water system under the road."²⁷ The Department of Conservation and Recreation's 2021 Regional Sediment Management study emphasizes this point, acknowledging that while beach nourishment is a short-term solution "unless steps are taken to disrupt the erosive forces on the shoreline (i.e., structural improvements), the shoreline is likely to continue to erode at a rate of 30-70 feet per year." The study further notes that while the unraveling of the south jetty would reduce erosive pressure on Reservation Terrace, it would likely result in increased erosion to the east facing coastal beach, as was experienced during the last period of jetty disrepair prior to 2013.²⁶ To combat this, the study recommends creating a weir (20-30 meters in length) by lowering a portion of the southern jetty to allow flow to pass over in a controlled manner. To further reduce the chance of unintended erosion along the coastal beach, it is recommended that stone removed from the formation of the weir could be used as a jetty spur to better control the passage of water and sand.²⁶ As Newburyport is one of the communities (along with Salisbury, and Newbury) that is directly influenced by the jetty along the Merrimack River, the DCR report anticipates that these communities along with the USACE will be involved in efforts to develop a long-term solutions to sediment loss and

²⁴ Army Corps of Engineers (2021). Section 204 Beneficial Use of Dredged Material FROM Federal Navigation Project Maintenance Detailed Project Report and Environmental Assessment.

²⁵ Massachusetts Coastal Erosion Commission (2015). Volume 1: Findings and Recommendations.

https://www.mass.gov/files/documents/2016/12/sd/cec-final-report-dec2015-complete.pdf

²⁶ MA Department of Conservation & Recreation (2021). Upper North Shore Regional Sediment Management Study.

²⁷ Army Corps of Engineers (2021). Section 204 Beneficial Use of Dredged Material FROM Federal Navigation Project Maintenance Detailed Project Report and Environmental Assessment.

stabilization of the barrier beach system.²⁸ To act on this expectation, funding and support will likely be needed to develop and implement a comprehensive and dynamic remediate plan for this site.

Climate Change: Newburyport is already experiencing coastal erosion, which is likely to accelerate with climate change. With heightened sea levels and more intense and frequent storms, the barrier beach of plum island is likely to experience increased wave action and tidal inundation of coastal areas (marsh, beach and dunes) that currently help to reduce storm surge and erosion. This will cause landward retreat of these natural systems, which reduces the natural buffer they provide to existing development. These conditions will cause further risk for populations and structures in the densely populated areas of Plum Island.

Land Use

With a growing population and continued pressure for additional housing, vacant land is scarce in Newburyport. Vacant residential parcels make up just 2.6% of land in Newburyport. As discussed above, nearly 1/4 of that land lies within a designated FEMA Flood Hazard Area (100 or 500-year floodplain). Of vacant commercial and industrial land, less than 2% is within a Flood Hazard Area. Newburyport regulates development in the Floodplain through the Newburyport Zoning Ordinance which creates a Floodplain Overlay District and associated Regulations (Section XIII) requiring compliance with the following regulations:

The Floodplain District is established as an overlay district to all other districts. All development in the district, including structural and nonstructural activities, whether permitted by right or by special permit, must comply with MGL c. 131, § 40 (The Wetlands Protection Act) and with the following:

- a) Massachusetts General Laws (M.G.L.), Chapter 131, Section 40 (The Wetlands Protection Act)
 - b) Sections of the Massachusetts State Building Code which address floodplain and coastal high hazard areas (currently 780 CMR including but not limited to Section 2102.0 entitled "Floodplain Resistant Construction");
 - c) Wetlands Protection Regulations, Department of Environmental Protection (DEP) (currently 310 CMR 10.00);
 - d) Inlands Wetlands Restrictions, DEP (currently 310 CMR 13.00);
 - e) Coastal Wetlands Restrictions, DEP (currently 310 CMR 12.00);
 - f) Minimum Requirements for the Subsurface Disposal of Sanitary Sewage, DEP (currently 310 CMR 15, Title 5);

Any variances from the provisions and requirements of the above-referenced State regulations may only be granted per their required variance procedures. In addition to the

²⁸ MA Department of Conservation & Recreation (2021). Upper North Shore Regional Sediment Management Study. Newburyport Multi-Hazard Mitigation Plan 2022

resource areas protected by the Massachusetts Wetland Protection Act (Chapter 131, Section 40), Newburyport's Wetland Ordinance protects "Lands subject to flooding or inundation by groundwater or surface water and lands subject to tidal action, coastal storm flowage, or flooding" and the associated Regulations identify performance standards for that resource. The Regulations also require the consideration of Sea Level Rise Projections based on data from Boston.²⁹ Specifically, the Regulations state:

"At a minimum, for activities proposed in A and V-Zones, a rate of relative sea level rise in Massachusetts of 40 inches by the year 2070 shall be incorporated into the project design and construction. (40 inches of SLR by 2070 was selected because it is consistent with both the National Oceanic and Atmospheric Administration's (NOAA's) and the BRAG Report's likely SLR scenarios, is the basis for the City of Boston's neighborhood coastal resilience plans and was adopted by the Boston Planning and Development Agency as part of their "Coastal Flood Resilience Design Guidelines" in 2019);"

Additional regulations specific to Land Subject to Coastal Storm Flowage can be found in the Newburyport Wetlands Regulations (last revised 12/5/2019).

Further analysis of vacant residential parcels (Land Use Codes 130 Developable land and 131 Potentially developable lands) shows that over 184 acres contain land in some portion of the floodplain as shown on FIRM maps. As the frequency and intensity of rainfall events increases, flooding is likely to increase. Sea level rise and storm surge will also challenge residents in coastal areas. Development of residential structures and redevelopment should be prioritized outside of designated Flood Hazard Areas to protect Newburyport residents. This is highlighted Newburyport's MVP actions where stakeholders recommended stricter zoning for FEMA flood zones and requirements to design new development to incorporate sea level rise projections. Limits on new development, especially on Plum Island, were also included in the proposed actions.

Commercial and Industrial properties are also vulnerable to flooding. Commercial and industrial properties are not only subject to possible loss of property and revenue during flood events but also the valuable services, products, and jobs they provide to the community and region. Approximately 5.5% of existing commercial and industrial property in Newburyport is within a Flood Hazard Area with an additional 1.5% of vacant commercial and industrial land in these zones.

²⁹ The Boston Research Advisor Group. 2016. Climate Ready Boston, Climate Change and Sea Level Rise Projections for Boston.

Flooding and Critical Infrastructure

Table 4.1.3 Newburyport Critical Facilities in Flood Hazard Areas									
Facilities in 100-Year Floodplain									
Facility Name Parcel ID / Street Location 2020 Buildings Valuation									
Wastewater Treatment Plant	23-11	\$12,699,400.00							
US Coast Guard Station – Merrimack Riv	ver 17-10	\$2,744,300.00							
Custom House Museum	12-10	\$1,440,000.00							
Plum Island Public Safety Building	77-125-A	\$88,400							
National Grid Substation	20-1	\$1,296,800.00							
Hilton's Lift Station	48-23	\$500,000.00*							
Water Street Pump Station	31-7	\$500,000.00*							
Whites Court Pump Station	52-83	\$500,000.00*							
Plum Island Vacuum Pump Station	U02-0-171**	**In Town of Newbury							

Critical Infrastructure identified by the Newburyport Core Team was identified on maps used in the workshop process. These mapped facilities were overlaid with the FEMA Flood Insurance Rate maps to identify what critical infrastructure might be vulnerable to flood events. Of over 75 facilities, only the following are in a Flood Hazard Area.

Facilities in 500- <i>Year</i> Floodplain								
Facility Name	Parcel ID / Street Location 2020 Buildings Valuation							
None								

* Pump station estimated value, not assessed value of land

MVPC also examined *non*-critical facilities in the 100-year floodplain areas. This analysis revealed the presence of 968 residential, commercial, industrial, and institutional structures in the 100-year floodplain. Based on current (2021) Assessor records, these structures collectively are valued at over \$200 million. Residential structures account for \$160.6 million (80.2%) of the total valuation, followed in turn by commercial at \$19 million (9.4%), institutional at \$11.8 million (5.9%), and industrial at \$8.9 million (4.5%).

Table 4.1.4 Assessed Value of Buildings in the 100-Year Floodplain						
City/Town	Number of Buildings	Assessed Building Value by Land Use Type Residential Commercial Industrial Institutional				Total Assessed Value in 100-Yr
Newburyport	968	\$160,636,100	\$19,006,500	\$8,929,300	\$11,792,300	\$200,364,100.00

The total assessed value of all buildings in Newburyport is \$3,450,859,500 to provide

context for the above. While the table figures provide an estimate of the building values, they do not include the estimated cost of replacing building contents. It is also important to note that loss of property does not reflect the entire cost of a region-wide flood event. There may also be added personnel (overtime) costs, rescue and evacuation costs, infrastructure repair/replacement costs, sediment and debris cleanup costs, and economic costs related to business closures.

In addition to threatening homes and other building structures, flood events pose risks to critical infrastructure, such as bridges and dams. The ability of these structures to withstand flood events depends in part on their current maintenance and repair status. Dam failure during a flood event can pose a serious threat to downstream properties by releasing a surge of water that was stored behind the dam before its failure.

Bridges

Bridges in Massachusetts are rated in accordance with standards set by the American Association of State Highway and Transportation Officials (AASHTO). AASHTO standards rate bridges on a scale of 1 to 100, with one being the least compliant with the ideal and 100 being the most compliant. Bridges with an AASHTO rating lower than 50 are considered in need of improvement and are placed on a state bridge repair list. In some cases, a bridge may have an AASHTO rating greater than 50 but is considered deficient due to a specific key structural problem with a particular component. A bridge may also be considered functionally obsolete, meaning that the roadway carried by the bridge does not meet current design standards for features such as roadway width. For flood-related hazards, the designation of structurally deficient is the most critical.

Currently, the seven of the nine federally inspected MassDOT highway bridges in Newburyport have AASHTO ratings ranging between 69.6 and 94 and are not considered structurally deficient. Two bridges on Route 1, over Merrimac Street and the Merrimack River are rated below 50 (46 and 48.5) and are listed as structurally deficient though both are listed as open with no restrictions.

Locally, the bridge on Plummer Spring Road, shared with the Town of West Newbury, is listed as structurally deficient and is currently closed. Several additional structures on Newburyport's inventory of bridges are listed as closed, abandoned, or removed and include a cattle crossing, a railroad bridge, and a foot bridge.

Dams

A *dam* is an artificial barrier that can impound water, wastewater, or any liquid for the purpose of storage or control. Dam failure can be defined as a catastrophic failure characterized by the sudden, rapid, and uncontrolled release of impounded water. Dams can fail for several reasons:

Overtopping caused by floods that exceed the capacity of the dam

- Deliberate acts of sabotage
- Structural failure of materials used in dam construction
- □ Movement and/or failure of the foundation supporting the dam
- Settlement and cracking of concrete or embankment dams
- D Piping and internal erosion of soil in embankment dams
- □ Inadequate maintenance and upkeep

Dam failures are potentially the worst of flood events. Typically, a dam failure is the result of neglect, poor design, or structural damage caused by a major event such as an earthquake. When a dam fails, huge volumes of water are often released, causing widespread destruction and potential loss of life. Although infrequent, floods due to dam failures have occurred in New England in the past. On May 16,1874, in Williamsburg, Massachusetts, a landslide destroyed a 43-foot dam on Mill Creek, a tributary of the Connecticut River, resulting in the deaths of 144 people.

Dams are classified by the Massachusetts Department of Conservation and Recreation's Office of Dam Safety according to their "hazard potential." Dams are classified as *High Hazard* (Class I), *Significant Hazard* (Class II), and *Low Hazard* (Class III). Each level of classification has an associated hazard potential. Class I dams are located in areas where "failure or misoperation will likely cause loss of life and serious damage to home(s), industrial or commercial facilities, important public utilities, main highway(s), or railroad(s)". Class II dams are located in areas "where failure or misoperation may cause loss of life and damage home(s), industrial or commercial facilities, secondary highway(s) or railroad(s) or cause interruption of use or service of relatively important facilities." Class III dams are located in areas "where failure or misoperation may cause loss of life and others." Loss of life is not expected from the failure of Low Hazard dams.

It is important to note that a dam's hazard classification is not an assessment of its potential for failure. For example, a Class I – High Hazard Dam does not have a higher potential for failure than a Class III – Low Hazard Dam. The hazard classification identifies the potential damage that would be caused if failure were to occur. However, because of the greater risk posed by higher hazard dams, the state requires more frequent inspections of such dams. The higher the hazard classification, the more frequently dam inspections must be performed. Low Hazard dams must be inspected at least once every ten years. Significant Hazard dams must be inspected at least once every five years, while High Hazard Dams must be inspected once every two years.

In addition to the requirement that high hazard dams be inspected every two years, owners are also required to develop Emergency Action Plans (EAPs) that outline the activities that would occur if the dam failed or appeared to be failing. This plan should include a notification flow chart, a list of response personnel and their responsibilities, a map of the inundation area that would be impacted, and a procedure to warn and evacuate residents in the inundation area. The EAP must be filed with local and state emergency agencies.

According to DCR Office of Dam safety records, as of May 2020, there are five Newburyport-owned dams on the statewide dam classification inventory. A table showing all of the Newburyport-owned dams and their current status per the Office of Dam safety can be found in **Table 4.1.3** below.

Table 4.1.5 Newburyport Dams							
Dam Name	Impoundment Name	Hazard Classification	Date of Most Recent Inspection				
Lower Artichoke River Dam	Artichoke River	Low Hazard	Not required				
Lower Artichoke Reservoir Dam	Lower Artichoke Reservoir	Low Hazard	Not required				
Upper Artichoke Reservoir Dam	Upper Artichoke Reservoir	Low Hazard	Not required				
Fred Maudslay Dam	Flowering Pond	Low Hazard	Not required				
Indian Hill Reservoir Dam (located in West Newbury but owned by Newburyport)	Upper Artichoke Reservoir	Low Hazard	Not Required				

While none of Newburyport's dams are classified by DCR as either a "high hazard" or a "significant hazard" dam, local officials in recent years have taken action to address conditions at the Upper Artichoke Reservoir Dam, built in 1915. During inspection in 2012 and 2013, it was discovered that the dam, inlet pipes and gatehouse were deteriorating and required major repairs. Improvements completed in Fall 2014 by the City have restored the dam and provided the Newburyport Water Department with updated technology to control basic dam functions.

Newburyport's Climate Resiliency Plan identifies that the Lower Artichoke Reservoir Dam will require improvements in order to protect it from sea level rise and storm surge. The Lower Artichoke dam's spillway currently sits approximately 3 feet lower than FEMA's 100year flood elevation. Thus, a less than 100-year storm event could overtop the spillway with CSO tainted Merrimack River waters thereby cutting off access to 75% of the city's water supply. Action items to address this vulnerability are identified in Section 8: Mitigation Action Plan and much greater detail can be found in the Resiliency Plan.

4.2 Wind-Related Hazards

High winds pose a risk to the communities of the Merrimack Valley region. As wind speed increases, pressure against an object increases at a disproportionate rate. For example, a 25 mile per hour wind causes about 1.6 pounds of pressure per square inch. When the wind speed increases to 75 mph, the force on that same object increases to 450 pounds Newburyport Multi-Hazard Mitigation Plan 2022 62

per square inch. At a wind speed of 125 mph, the force increases to 1,250 pounds per square inch. High winds can cause considerable damage to structures, infrastructure, and trees. Winds sustained at 31 to 39 mph for at least one hour, or any gusts of 46 to 57 mph, cause the National Weather Service to issue a Wind Advisory. While winds 58 mph or higher would lead to the issuance of a High Wind Warning.

Located on the coastal plain, Newburyport is exposed to the open Atlantic and can be susceptible to high wind events associated with coastal storms, storm systems traversing the Ohio River Valley to our West (such as the Mother's Day Storm of 2006), as well as passing frontal systems. As climate enhanced storm activity increases, so will damage from wind. Wind coupled with heavy precipitation, especially in the form of snow and ice, is most damaging. Newburyport's tree lined streets are interlaced with power lines and are particularly susceptible. In addition, many of Newburyport's buildings, especially its historic homes, are not built to withstand Hurricane force winds.³⁰

The region is susceptible to high wind from several types of weather events: before and after frontal systems, hurricanes and tropical storms, severe thunderstorms, and Nor'easters. The State Building Code incorporates engineering standards for wind loads. Calculating wind load is important in the design of the wind force-resisting systems (including structural members, components, and cladding) to ensure against shear, sliding, overturning, and uplift actions. The three major wind-related hazards that can occur in the region are hurricanes, tornadoes, and coastal storms (Nor'easters). While less frequent than coastal storms, hurricanes and tornadoes have the greatest potential to cause massive, widespread damage and loss of life in Newburyport. Unlike flooding, where historical river flow records allow the potential extent of flooding to be delineated with some accuracy within each community, delineating the exact area where a hurricane or tornado will strike is not possible. A brief description of hurricanes and tornadoes, along with the general risks associated with each for this region, follows.

Hurricanes

A hurricane is a type of tropical cyclone, an organized rotating weather system, that develops in the tropics. Tropical cyclones are classified as follows:

Tropical depression: An organized system of persistent clouds and thunderstorms with a low-level circulation and maximum sustained winds of 38 mph or less.

Tropical storm: An organized system of strong thunderstorms with a well-defined circulation and maximum sustained winds of 39-73 mph.



³⁰ Newburyport Climate Resiliency Plan, 2020 Newburyport Multi-Hazard Mitigation Plan 2022

Hurricane: An intense tropical weather system with a well-defined circulation and maximum sustained winds of 74 mph or higher.

The typical hurricane moves at an average speed of approximately 12 miles per hour. While in the lower latitudes, hurricanes tend to move from east to west. However, when a storm drifts further north, the westerly flow at the mid-latitudes tends to cause the storms to curve toward the north and east. When this occurs, the storm may accelerate its forward speed. This explains why some of the strongest hurricanes have reached New England.

Tropical depressions and tropical storms, while generally less dangerous than hurricanes, can be deadly. The winds of tropical depressions and tropical storms are usually not the greatest threat. Heavy rains, flooding, and severe weather such as tornadoes, create the greatest problems associated with tropical storms and depressions. Serious power outages can be associated with hurricanes and other tropical storms. After Hurricane Gloria in 1985, some area residents were without power for many days. Although not considered a Hurricane in eastern Massachusetts, storms associated with Hurricane Sandy in 2012 also left Newburyport residents in some parts of the city without power for several days. Hurricanes can occur along the East Coast of the United States anytime in the period between June and November. Based on the number and intensity of previous storms, mid-August through mid-October is defined as the peak hurricane season. Hurricane intensity and the potential property damage posed by a hurricane are rated from 1 to 5 according to the Saffir-Simpson Hurricanes given the potential for loss of life and property damage. The wind intensity and potential damage of each category are summarized in **Table 4.2.1** below.

Figure 4.2.1 Hurricane Categories

Category 1 – Winds 74 to 95 miles per hour (mph). Damage potential to unanchored mobile homes, trees, shrubbery, and poorly constructed signs.

Category 2 – Winds 96 to 110 mph. Damage to roofing material, doors, and windows. Considerable damage to mobile homes and poorly constructed signs. Significant damage to trees and shrubs, with some trees blown down.

Category 3 – Winds 111 to 130 mph. Small residences and buildings may experience some structural damage. Minor curtainwall* failure possible. Destruction of mobile homes and poorly constructed signs. Foliage is blown off trees and trees may be blown down.

Category 4 – Winds 131 to 155 mph. Small residences may experience complete roof structure failures. Mobile homes completely destroyed. All signs, trees, and shrubs blown down. Doors and windows extensively damaged.

Category 5 – Winds greater than 155 mph. Many residences and industrial buildings experience complete roof failure. Complete building failures possible. Small utility buildings blown over or away. All signs, trees, and shrubs blown down. Mobile homes completely destroyed. Windows and doors severely and extensively damaged.

Hurricane-force winds can destroy buildings and mobile homes. Debris, such as signs, roofing materials, siding, and lawn furniture can become missiles. Tree branches and even entire trees are downed and with them the telephone and power lines. Hurricanes can also spawn tornadoes. Tornadoes generally occur in thunderstorms embedded in rain bands well away from the center of the hurricane. They can also occur near the eyewall. Usually, tornadoes produced by tropical cyclones are relatively weak and short-lived.

A hurricane watch is issued when a hurricane or hurricane conditions pose a threat to an area in the next 36 hours. A hurricane warning is issued when hurricane winds of 74 mph or higher are expected in the next 24 hours. If a hurricane's path is erratic or unusual,

the warning may be issued only a few hours before the beginning of hurricane conditions.

While there have been relatively few direct hits from hurricanes in New England, peripheral effects from offshore hurricanes and tropical storms that track inland are not uncommon. In the period of time that records have been kept for hurricanes, Massachusetts has experienced 45 wind-related occurrences associated with hurricanes. Of those, six have had a direct impact



and 39 have had an indirect impact. The most recent hurricane to affect the region was Hurricane Bob, which passed through in 1991. **Table 4.2.1** provides a summary of hurricanes that have affected New England since 1938.

Date	Storm Event	Description	Deaths	Injuries	Property Damage	
9/21/1938 New Englar Hurricane		Highest sustained winds-121 mph. Forward motion in excess of 50 mph. 17 inches of rain; extensive flooding.	564	1700+	9,000 homes and businesses destroyed, 15,000 damaged.	
9/15/1944	Great Atlantic Hurricane	Forward motion in excess of 40 mph.	390	NA	\$925 million	
9/12/1950	Hurricane Dog	Center passed offshore Cape Cod. 4.42 inches of rain in 24 hours.	0	0	\$2 million	
9/07/1953	Hurricane Carol	Moved through the Bay of Fundy with only minor damage.	0	0		
8/31/1954	Hurricane Carol	First of three devastating hurricanes of 1954. Forward motion in excess of 50 mph. Category 3. Extensive flooding and damage.	60	NA	\$438 million	
9/11/1954	Hurricane Edna	Over 7 inches of rainfall. Extensive flooding.	29	NA	\$40.5 million	
10/15/1954	Hurricane Hazel	Forward motion over 50 mph.	600	NA	\$350 million	
8/00/1955	Hurricane Connie	Extensive flooding with 4-6 inches of rainfall	43	NA	\$40 million	
8/18/1955	Tropical Storm Diane	20 inches of rainfall caused devastating floods	184	NA	\$832 million	
8/29/1958	Hurricane Daisy	New England felt only periphery gales.	0	0	NA	
9/12/1960	Hurricane Donna	Category 2. Forward motion of 39 mph.	133	NA	\$387 million	
9/21-25/1961	Hurricane Esther	Did unusual loop-de-loop southeast of Cape Cod. 7-8 inches of rainfall. Forward motion slowed approaching New England.	0	NA	NA	
10/10/1961	Hurricane Frances	Category 3 storm, 110 mph winds. Some wind damage in New England	NA	NA	NA	
8/29/1962	Hurricane Alma	Minor damage only.	NA	NA	NA	
10/6-7/1962 Hurricane Daisy Hakefield, MA. Significant flooding occur throughout New England. Set record for 2		Wakefield, MA. Significant flooding occurred throughout New England. Set record for 24- hour precipitation which remained unbroken	24	NA	NA	
0/29/1963	Hurricane Ginny	Famous snow hurricane in Maine with up to 18 inches falling in the mountains.	0	0	\$300,000	
14/1964	Hurricane Dora	Moderate rainfall.	3	NA	\$200 million	
24/1964	Hurricane Gladys	Moderate to heavy precipitation.	2	NA	\$6.7 million	
13/1966	Hurricane Alma	Minor damage.	5	NA	\$1.5 million	
9/1969	/1969 Hurricane Gerda Center passed directly over Nantucket with gusts up to 140 mph.		NA	NA	NA	
28/1971	Tropical Storm Doria	Wind gusts up to 80 mph. Heavy rains, flooding.	3	NA	NA	

Date	Storm Event	Description	Deaths	Injuries	Property Damage	
9/14/1971		Moderate rainfall, little damage.	0	0	NA	
9/3-4/1972	Tropical Storm Carrie	Hurricane-force wind gusts. Heavy rainfall	1	NA	\$1.2 million	
7/27/1975	Hurricane Blanche	Most heavy weather remained offshore	0	NA	NA	
8/9-10/1976	Hurricane Belle	Category 1. Forward motion 32 mph. Heavy rainfall causes some flooding.	3	3	NA	
9/6/1979	Tropical Storm David	Minor effects	1,100 virgin Islands	NA	\$60 million	
9/25/1985	Tropical Storm Henri	Minor effects	0	0	NA	
9/27/1985	Hurricane Gloria	Category 2. Forward motion of 72 mph. Gusts to 80 mph.	NA	3	\$1 billion	
8/7/1988	Tropical Storm Alberto	Winds of 50 mph.	31	NA	\$500 million	
8/19/1991		Category 2. Forward motion of 51 mph. Wind speeds of up to 60 mph. Set new 24- hour precipitation record. Major flooding and power outages.	18	NA	\$1.5 billion	
10/30- 11/01/1991	Unnamed "Halloween"	Huge storm surge caused extensive damage along the coast.	12	NA	\$210 million	
7/13/1996	Hurricane Bertha	Forward motion of 48 mph. Very heavy rainfall and strong gusty winds. Spawned one tornado in Massachusetts.	12	NA	\$275 million	
9/02/1996	Hurricane Edouard	Left 40,000 residents without power, 3 inches of rain fell.	0	0	\$3.5 million	
7/25/1997	Tropical Storm Danny	Dropped 3-5 inches of rain.	0	0		
9/16-17/1999	Tropical	Forward motion of 56 mph. No significant damage in Massachusetts.	0	0	\$4.5 billion	
9/03/2010	Hurricane Earl	Tropical Storm passed 98 miles east of New England with winds of 40+ mph producing high surf, heavy rain, and coastal flooding.	1	0	NA	
8/21/2011	Tropical Storm Irene	Hurricane Irene became a tropical storm as it moved inland over NY, CT, MA, NH and ME	42	NA	\$7-10 billion (est.)	
10/29- 30/2012	Hurricane Sandy	Category 1. Schools and public transportation closed in many communities.	285		\$75 billion (est.)	
9/20/2017	Jose	Hurricane Jose became a tropical storm as it stalled off the coast of Nantucket.	0	0	\$10K	
9/7/2019	Hurricane Dorian	Passed about 140 miles southeast of Nantucket with some minor wind damage in southeastern Massachusetts.	0	0	\$0.50K	
8/4/2020	Tropical Storm Isaias	Tropical Storm Isais moved from coastal Virginia to the NYC area, causing widespread wind damage across southern	0	0	0	

The National Oceanic and Atmospheric Administration (NOAA) Coastal Services Center provides a searchable database that allows one to query hurricane records dating back to as early as 1851. Query results show historical storm tracks by storm intensity within a specified radius of a site. Query results for this region for hurricanes of Category 1 or above, passing within a 75-mile radius, show eight Category 1-5 hurricanes, as depicted in **Figure 4.2.2** According to NOAA's Historical Hurricane Tracker, 39 hurricane or tropical storm events have occurred in the vicinity of Massachusetts between 1842 and 2019. Within this period the Commonwealth was not impacted by any Category 4 or 5 hurricanes, however, the state was impacted by three Category 3 hurricanes, four Category 2 hurricanes, ten Category 1 hurricanes, and 25 tropical storms. Also, within this time a total of 31 tropical depressions and extratropical events impacted the Commonwealth.³¹



Figure 4.2.2 Historical Hurricane Tracks over Massachusetts

³¹ Commonwealth of Massachusetts Tropical Cyclone Profile, July 2020 Newburyport Multi-Hazard Mitigation Plan 2022

As noted above, however, a hurricane's wind intensity alone does not speak to the threat posed by intense rains that can cause serious inland flooding. Less intense hurricanes, or tropical storms, can carry higher rainfall amounts independent of wind speed. **Figure 4.2.3** on the following page shows all Tropical Storms whose centers have passed within 10 nautical miles of the Massachusetts state boundary from 1851 to 2020.

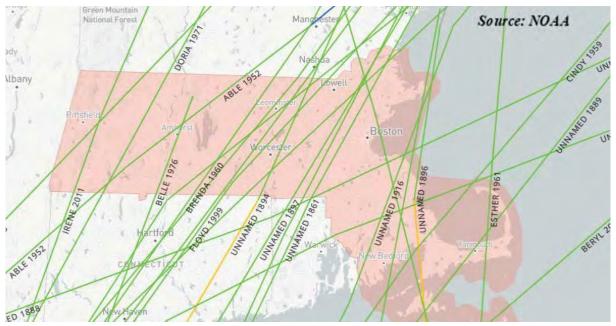


Figure 4.2.3 Tropical Storm Tracks over Massachusetts (1851-2020)

In the Merrimack Valley region's coastal area, including Newburyport, rapidly rising **storm surge** is the hurricane's primary threat to public safety, especially if timely notification and evacuations are not undertaken. Storm surge is a dome of water that moves ashore to the right of the hurricane eyewall. It packs a tremendous force, and places people and property in its path at grave risk. For this reason, it is imperative that residents and visitors alike be alerted to remain well above surge elevations until all threats have passed.

In the case of Plum Island, storm surge can scour and erode large swaths of beach and dunes, significantly altering the configuration of the shoreline. The extent of surge damage depends on the hurricane's intensity, size, and direction of movement. Storm surges cause flooding that can quickly render evacuation routes impassable, cripple communications. cause sewers and stormwater systems to back up, and contaminate local drinking water supplies.



Storm surge flooding can wash out roads and parking areas, leaving behind mounds of sand and debris and rendering streets impassable long after surge waters have receded.



Figure 4.2.4 Hurricane Storm Surge Inundation – Lower and Upper Artichoke Reservoirs

The Worst-Case Hurricane Surge Inundation water levels are derived from the Sea, Lake, and Overland Surge from Hurricanes (SLOSH) computerized weather model. SLOSH was developed by the National Weather Service (NWS) to estimate storm surge (the rise of water generated by a storm, over and above the predicted astronomical tides) resulting from historical, hypothetical, and predicted hurricanes. The SLOSH model computes storm surge heights from tropical cyclones using pressure, size, forward speed, and track data to create a model of the wind field which pushes the water around thereby calculating a potential "worst-case" surge based on the results from thousands of combinations of hurricane category, forward speed, pressure, pre-landfall location, direction,

and local topography. The SLOSH model does not include rainfall amounts, river flow, or wind-driven waves riding in atop of a storm surge. The Resiliency Plan goes into further detail outlining the vulnerability of the various critical assets and neighborhoods under current and future Worst-Case Hurricane Storm Surge Inundations (example scenario in Figure 4.2.4 above).³²

Hurricanes in Newburyport are considered a medium frequency event. As defined by the 2018 Massachusetts State Hazard Mitigation and Adaptation Plan, this hazard occurs more frequently than once in 5 years (a greater than 20% chance per year). Hurricanes and tropical storms will impact the planning area equally although it was noted by Newburyport stakeholders that some critical assets and identified neighborhoods, are at greater risk for these events. Vulnerable assets include the public water supply, Wastewater Treatment Facility, and the National Grid substation on Water Street. Vulnerable neighborhoods include Plum Island and the Plum Island Turnpike, Joppa/Water Street, Downtown Waterfront, Cashman Park/Merrimac Street, and the Business Park. Residents of these areas may be left without access to vital services during these outages.

Tornadoes

According to the American Meteorological Society's Glossary of Meteorology, a tornado is "a violently rotating column of air, pendant from a cumuliform cloud or underneath a cumuliform cloud, and often (but not always) visible as a funnel cloud." The most deadly and destructive tornado forms from a supercell, which is a rotating thunderstorm with a well-defined circulation called a mesocyclone. Normally a tornado will stay on the ground no longer than twenty minutes.

³² Newburyport Climate Resiliency Plan 2020

Tornadoes can appear from any direction, but most move from southwest to northeast, or west to east. Tornadoes can last from several seconds to more than an hour. Most last less than ten minutes. Over 80% of tornadoes strike between noon and midnight. "Tornado season" is generally from March through August, although a tornado may occur any time of the year. Some ingredients for tornado formation include:



- □ Very strong winds in the mid and upper levels of the atmosphere;
- Clockwise turning of the wind with height (i.e., from the southeast at the surface to west aloft);
- □ Increasing wind speed in the lowest 10,000 feet of the atmosphere (i.e., 20 mph at the surface and 50 mph at 7,000 feet);
- □ Very warm, moist air near the ground with unusually cooler air aloft; and
- □ A forcing mechanism, such as a cold front or leftover weather boundary from a prior shower or thunderstorm activity.

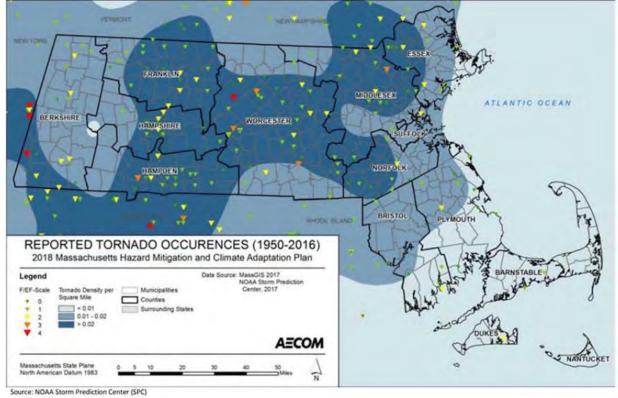
The most devastating tornado to occur in New England was the Worcester tornado of July 9, 1953, killing 96 people and injuring over 1,300. On average, six tornadoes per year touch down somewhere in New England. Those most at risk include people in automobiles, anyone not in a secure structure, and residents of mobile homes. Since 1951, there have been 166 tornadoes in Massachusetts, which resulted in 109 fatalities and 1,562 personal injuries. Within the Merrimack Valley region, there have been seven tornadoes since 1951, as shown in **Table 4.2.2** below.

Table 4	Table 4.2.2 Tornadoes in the Merrimack Valley Region (1951- Present)						
Year	Date	Tornadoes	Category	Injuries	Fatalities		
1951	8-21-51	1	F2	0	0		
1956	6-13-56	1	F1	0	0		
1956	11-21-56	1	F2	0	0		
1960	7-13-60	1	F0	0	0		
1964	5-19-64	1	F0	0	0		
1971	7-1-71	1	F1	1	0		
1991	8-15-91	1	F1	0	0		

Source: www.tornadohistoryproject.com

According to the Commonwealth's 2018 on all-time initial touchdown locations across

the Commonwealth as documented in the NOAA NCDC Storm Events Database.³³ The following Figure 4.2.5 shows the area of the state at greatest risk runs from central to northeastern Massachusetts including a portion of the Merrimack Valley region.





The National Weather Service (NWS) issues tornado forecasts through each local NWS office. In predicting severe weather, meteorologists look for the development of instability, lift and wind shear for tornadic thunderstorms. Real-time weather observations from satellites, weather stations, weather balloons, and radar become highly important as a storm approaches. A tornado watch defines an area where tornadoes and other types of severe weather are possible in the next several hours. A tornado warning means that a tornado has been spotted, or that Doppler radar indicates a thunderstorm with a circulation that can spawn a tornado.

Tornado damage severity is measured by the Fujita Tornado Scale, in which wind speed is not measured directly but rather estimated from the amount of damage. As of February 2007, the National Weather Service began rating tornados using the Enhanced Fujita-scale (EF-scale). It is considerably more complicated than the original F-scale, and it allows surveyors to create more precise assessments of tornado severity. **Tables 4.2.3** and **4.2.4** illustrate the EF-scale and the damage indicators. Its uses three-second gusts

³³ Massachusetts SHMCAP, September 2018

estimated at the point of damage as judged by eight levels of damage to the 28 indicators listed in Table 4.2.3. These estimates vary with height and exposure.

Table 4.2.3 The Enhanced F-Scale							
F Number					Operationa	I EF Scale	
Number	mile (mph)	gust (mph) ¹	EF Number	3-second gust (mph)	EF Number	3-second gusts (mph)	
0	40-72	45-78	0	65-85	0	65-85	
1	73-112	79-117	1	86-109	1	86-110	
2	113-157	118-161	2	110-137	2	111-135	
3	158-207	162-209	3	138-167	3	136-165	
4	208-260	210-261	4	168-199	4	166-200	
5	261-318	262-317	5	200-234	5	Over -200	

Source: www.noaa.gov

Number	Damage Indicator	Abbreviation
1	Small barns, frames outbuildings	SBO
2	One or two-family residences	FR12
3	Single-wide mobile home	MHSW
4	Double-wide mobile home	MHDW
5	Apt, Condo, townhouse (3 stories or less)	ACT
6	Motel	М
7	Masonry Apt. or motel	MAM
8	Small retail building (fast food)	SRB
9	Small professional (Doctor office, Bank)	SPB
10	Strip Mall	SM
11	Large shopping mall	LSM
12	Large, isolated (big box) retail building	LIRB
13	Automobile showroom	ARS
14	Automobile service building	ASB
15	School – 1-story elementary (interior or exterior halls)	ES
16	School – jr. or sr. high school	JHSH
17	Low-rise (1-4 story) building	LRB
18	Mid-rise (5-20) building	MRB
19	High-rise (over 20 stories	HRB
20	Institutional bldg. (hospital, govt. or university)	IB
21	Metal building system	MBS
22	Service station canopy	SSC
23	Warehouse (tilt-up walls or heavy timber)	WHB
24	Transmission line tower	TLT
25	Free-standing tower	FST
26	Free-standing pole (light, flag, luminary)	FSP
27	Tree - hardwood	ТН
28	Tree - softwood	TS

Table 4.2.4 Enhanced F-Scale Damage Indicators

Source: www.noaa.gov

The Disaster Center evaluated tornado statistics from 1950-1995 by state. When compared with other states across the country, Massachusetts ranked 35th in frequency, 16th in the number of tornado-related deaths, 21st in the number of injuries, and 12th for the cost of tornado-related damages. In terms of tornado frequency per square mile, Massachusetts ranked 14th in overall frequency, and first in terms of fatalities, injuries, and cost per area.

On June 9, 1953, one of the most powerful tornadoes ever recorded struck Worcester, Massachusetts, killing 96 people. The damage caused by this one event, relative to the State's small size, accounts for the statistical rankings previously cited.

In Essex County, 12 tornadoes were recorded from 1950 to 2021 (source: NOAA National Climatic Data Center). Of these, all fell within the lower F0 to F2 windspeed and damage categories. Since 1991, no tornadoes have been recorded for Essex County according to the NOAA database. On July 27th-28th, 2014, however, four tornado strikes occurred in New England, the closest taking place in the North Shore community of Revere, MA just south of the Merrimack Valley region. The EF2 force tornado of 120 mph winds accompanied by torrential rain lasted about four minutes and cut a swath of destruction two miles long and 3/8-mile-wide through the coastal community of Revere. According to the City Fire Department, 65 buildings were substantially damaged including 13 homes left uninhabitable.

Tornado events in Newburyport are considered a low frequency event. As defined by the 2018 Massachusetts State Hazard Mitigation and Adaptation Plan, this hazard may occur from once in 50 years to once in 100 years (a 1% to 2% chance per year).

Severe Thunderstorms

The National Weather Service considers a thunderstorm to be severe if it produces hail at least ³/₄ inch in diameter, has winds of 58 mph or higher, or has the potential to produce a tornado. Lightning accompanies all thunderstorms and can cause death, injury, and property damage. Straight-line winds can exceed 100 mph and are responsible for most thunderstorm wind damage. A downburst, a small area of rapidly descending air beneath

a thunderstorm, can reach speeds equal to that of a strong tornado.

Three basic ingredients are required for a thunderstorm to form: moisture, rising unstable air (air that keeps rising when given a nudge), and a lifting mechanism to provide the impetus. The sun heats the surface of the earth, which warms the air above it. When this warm surface air begins to rise, such as in areas with hills or mountains, or areas where warm/cold or wet/dry



air bump together, it will continue to rise as long as it weighs less and stays warmer than the air around it. As the air rises, it transfers heat from the surface of the earth to the upper levels of the atmosphere (a process known as convection). The water vapor in the air begins to cool, releases heat, and condenses into a cloud. The cloud eventually expands upward into areas where the temperature is below freezing. Some of the water vapor turns to ice, and some of it turns into water droplets. Both ice particles and water droplets have electrical charges. Ice particles usually have positive charges, and rain droplets usually have negative charges. When the charges build up, they are eventually discharged in a bolt of lightning, which causes the sound waves we hear as thunder.

An average thunderstorm is 15 miles in diameter and lasts an average of 30 minutes. *Severe* thunderstorms can be much larger and last much longer. Southern New England typically experiences about 10-15 days per year in which there are *severe* thunderstorms. It is not unusual for the Merrimack Valley region to experience a few moderate-to-severe thunderstorms throughout the spring and summer. The greatest hazard caused by this type of storm is flash flooding. Additionally, hail can cause substantial damage to property and crops. Large hailstones can fall faster than 100 mph and be very costly in terms of economic losses.

Every thunderstorm has an updraft (rising air) and a downdraft (sinking air, usually with the rain). However, sometimes, there are extremely strong downdrafts, known as downbursts, which can cause tremendous straight-line wind damage at the ground, similar to that of a tornado. A small (< 2.5-mile path) downburst is known as a "microburst" and a larger downburst is called a "macroburst." An organized, fast-moving line of an embedded microburst that travels across large portions of a state is known as a "derecho" and this can occasionally occur in Massachusetts. The strongest downburst ever recorded was 175 mph, near Morehead City, North Carolina. Winds exceeding 100 mph have been measured in Massachusetts from downbursts.

There have been several damaging thunderstorms in Massachusetts. In June of 1998, a very slow-moving and complex storm system moved through southeast New England. The combination of its slow movement and presence of tropical moisture across the region produced rainfall of 6 to 12 inches over much of eastern Massachusetts. This led to widespread urban, small stream, and river flooding. As a result, the counties of Bristol, Essex, Middlesex, Norfolk, and Suffolk received a Presidential Disaster Declaration for the Individual Household Program (Individual Assistance) on June 23, 1998.

According to the NOAA Storm Events Database Essex County experienced 30 days of Thunderstorm Wind events causing nearly \$770 thousand in property damage since 2015. This includes 3 events reported in Newburyport the most recent of which occurred on August 21, 2019. The NOAA event database describes the event as "a warm front moved across southern New England and a moist southerly low-level jet at 850 mb developed. This set the stage for scattered severe thunderstorms, some prompting Tornado Warnings, but the strong rotation remained aloft. In Newburyport, due to thunderstorm winds, wires were down across a span of three houses on Harrison Street." Highest winds were reported at 57 mph.

Severe thunderstorms are considered high frequency events in Newburyport. As defined by the 2018 Massachusetts State Hazard Mitigation and Adaptation Plan, this hazard may occur more frequently than once in 5 years (greater than 20% chance per year).

4.3 Winter-Related Hazards

Severe winter storms can produce a wide variety of hazardous weather conditions, including heavy snow, freezing rain, sleet, and extreme wind and cold. A severe winter storm is one that results in four or more inches of snow over 12 hours, or six or more inches over 24 hours. The leading cause of death during winter storms is from an automobile or other transportation accident. Exhaustion or heart attacks caused by overexertion are the second most likely cause of winter storm-related deaths.



The National Weather Service issues outlooks, watches, warnings, and advisories for all winter weather hazards. These statements are defined as follows:

Outlook: Winter storm conditions are possible in the next 2-5 days
Watch: Winter storm conditions are possible in the next 36-48 hours
Warning: Life-threatening severe winter conditions have begun or will begin
Advisory: Winter weather conditions are expected to cause significant inconveniences and may be hazardous

The most severe winter storm to ever strike New England was the Blizzard of 1888. This storm occurred from March 11-14, 1888 and deposited up to 50 inches of snow. A century later, the Blizzard of 1978 dumped 24-36 inches of snow on the eastern part of the state and paralyzed much of the area for nearly a week. The winter of 2010-2011 produced some of the largest snowfall totals in the region's and state's history and included two blizzards, both occurring in January 2011. According to the National Weather Service, Boston received 80.1 inches of snow that winter, while the Merrimack Valley region received 74.5 inches.

The most significant annual snowfall years in the region, occurred in 1956 (120.5"), 2005

(110"), and 1969 (102.3"). More recently, the October 2011 snowstorm left 640,000 Massachusetts homes and residents without power, according to MEMA. Newburyport residents will not soon forget the winter storms of March 2018 when downed trees and utility lines resulted in power outages lasting several days throughout the Merrimack Valley. The NOAA Storm Events Database states that from eight to twenty-two inches of snow fell on Eastern Essex County. Numerous trees and wires were reported down. In addition to downed trees and power lines, Newburyport's



Snow and Wind Down Power Lines on Merrimac Street, March 2018 – Newburyport Daily News

Climate Resiliency plan states that, narrowing access for emergency vehicles, traffic,

and parking. Snowbank covered sidewalks also force pedestrians into the narrow streets alongside traffic.

Property damage throughout Essex County, estimated at \$120 thousand (\$37k Western Essex and \$83k Eastern Essex), was reported during the March 7 and 13, 2018 events. The March 13, 2018, event resulted in a FEMA Major Disaster declared on Jul 19, 2018.

Table 4.3.1 below details some of the most recent winter storms that have resulted in property damage since the prior MV Multi-Hazard Mitigation Plan.

Table 4.3.1 Winter Storm Events and Property Damage, Eastern and Western Essex County 2015-2019 (NOAA)							
Date of Event	Deaths	Injuries	Property Damage (\$)				
1/7/2017	0	0	0				
2/9/2017	0	0	0				
2/12/2017	0	0	0				
4/1/2017	0	0	0				
12/9/2017	0	0	0				
1/4/2018	0	0	2,000				
2/17/2018	0	0	0				
3/7/2018	0	0	55,000				
3/13/2018	0	0	65,000				
1/19/2019	0	0	0				
3/3/2019	0	0	0				
2/1/2021	0	0	0				

Blizzards are High frequency events in Newburyport. As defined by the 2018 Massachusetts State Hazard Mitigation and Adaptation Plan, this hazard occurs more than once in five years (a greater than 20% annual chance of occurring).

Oftentimes, the severity of winter related hazards is gauged through the extent (severity and magnitude) of extreme cold temperatures which accompany the event. This is typically measured through the Wind Chill Temperature Index. This index is defined as the temperature that people and animals feel when outside and is based on the rate of heat loss from exposed skin by the effects of wind and cold. In Massachusetts, a wind chill warning is issued by the National Weather Service (NSW) Norton Forecast Office when the Wind Chill Temperature Index is -25°F or lower for at least three hours. The NWS Windchill Chart (Figure 4.3.2) shows three shaded areas which are associated with how long a person can be exposed to windchill before developing frostbite.

Figure 4.3.1 NSW Wind Chill Temperature (WTC) Chart

from https://www.weather.gov/safety/cold-wind-chill-chart

100m

									Tem	pera	ture	(°F)							
	Calm	40	35	30	25	20	15	10	5	0	-5	-10	-15	-20	-25	-30	-35	-40	-4
	5	36	31	25	19	13	7	1	-5	-11	-16	-22	-28	-34	-40	-46	-52	-57	-6
	10	34	27	21	15	9	3	-4	-10	-16	-22	-28	-35	-41	-47	-53	-59	-66	-7
	15	32	25	19	13	6	0	-7	-13	-19	-26	-32	-39	-45	-51	-58	-64	-71	-7
	20	30	24	17	11	4	-2	-9	-15	-22	-29	-35	-42	-48	-55	-61	-68	-74	-8
511)	25	29	23	16	9	3	-4	-11	-17	-24	-31	-37	-44	-51	-58	-64	-71	-78	-8
wind (mpn)	30	28	22	15	8	1	-5	-12	-19	-26	-33	-39	-46	-53	-60	-67	-73	-80	-8
	35	28	21	14	7	0	-7	-14	-21	-27	-34	-41	-48	-55	-62	-69	-76	-82	-8
	40	27	20	13	6	-1	-8	-15	-22	-29	-36	-43	-50	-57	-64	-71	-78	-84	-9
	45	26	19	12	5	-2	-9	-16	-23	-30	-37	-44	-51	-58	-65	-72	-79	-86	-9
	50	26	19	12	4	-3	-10	-17	-24	-31	-38	-45	-52	-60	-67	-74	-81	-88	-9
	55	25	18	11	4	-3	-11	-18	-25	-32	-39	-46	-54	-61	-68	-75	-82	-89	-9
	60	25	17	10	3	-4	-11	-19	-26	-33	-40	-48	-55	-62	-69	-76	-84	-91	-9
					Frostb	ite Tir	nes	30	minut	es	10	minut	es [5 m	inutes				

-SATE

Northeasters/Nor'easters

Nor'easters occur in New England more frequently than hurricanes and typically have a longer duration than hurricanes. A Nor'easter is a large New England storm formed from a weather system traveling from South to North, passing along or near the seacoast. The Nor'easter derives its name from the northeasterly direction of its counterclockwise cyclonic winds. It is not unusual for the sustained winds of a Nor'easter to meet or exceed hurricane force. The duration of a Nor'easter may outlast a hurricane event by many hours or even days. High winds associated with a Nor'easter can last from 12 hours to 3 days, while the duration of a hurricane rarely exceeds 12 hours.

Nor'easters pose a threat to infrastructure, including critical facilities. During the height of a storm, blizzard conditions present a hazard to driving or any other outdoor activity. A blizzard is defined as a storm with winds in excess of 35 mph, with falling and blowing snow reducing visibility to less than 1/4 mile for at hours. Heavy disrupts least three snow transportation and may impede the passage of emergency vehicles. Heavy snow may also bring down power lines and trees, and lead to roof collapses. The Blizzard of 1978 dumped 24-48 inches of snow on eastern Massachusetts and



paralyzed the region for many days. Most recent blizzard events in Essex County include January 26, 2015 (31.4" reported in nearby Methuen) and March 14, 2017, when heavy snow and strong winds combined to create blizzard conditions.



In early March of 2013, the latest in a series of powerful coastal storms combined with damaging high tides blasted a path of destruction along Plum Island in Newbury and along Salisbury Beach in Salisbury. On Plum Island, according to a *Daily News* account, "a ferocious morning tide proved to be the knockout blow for two Annapolis Way homes after high seas washed away the sand dune from beneath them, compromising their foundations and rendering them

a danger to the public. Three other houses suffered significant structural damage in the storm and at least a dozen more were left teetering perilously close to the edge."

More recently, beginning on March 3rd, 2018, New England was impacted by the first of four significant storm systems that rode in atop of a nearly 10-foot tide (9.9 feet above mean low, low water or 5.6 feet NAVD88). Adding in a 2-3-foot storm surge resulted in a 12–13-foot storm tide (7.6-8.6 feet NAVD88). Aside from flooding the Plum Island turnpike, Old Point Road, and Sunset Boulevard, the combined level of the sea to the east and the river to the west, forced the water table under Plum Island to the surface to form ponds between dunes, streets and homes This ponding was not because of rainfall.

Recovery during the aftermath of a major snowstorm poses its challenges. Prolonged curtailment of all forms of transportation can have significant adverse impacts for people stranded at home, preventing the delivery of critical services such as home heating fuel supplies or the ability to get to a local food store. The cost of snow removal, repairing damages, and the loss of business can have severe economic impacts on local communities.

While the Fujita and Saffir-Simpson Scales characterize tornadoes and hurricanes, respectively, there is no widely used scale to classify snowstorms. The Northeast Snowfall Impact Scale (NESIS) developed by Paul Kocin of The Weather Channel and Louis

Uccellini of the National Weather Service characterizes and ranks high- impact northeast snowstorms. These storms have large areas of 10-inch snowfall accumulations and greater. The NESIS has five categories: Extreme, Crippling, Major, Significant, and Notable. The index differs from other meteorological indices in that it uses population information in addition to meteorological measurements. Thus, NESIS indicates a storm's societal impacts. This scale was developed due to the impact northeast snowstorms can have on the rest of the country in terms of transportation and economics.

NESIS scores are a function of the area affected by the snowstorm, the amount of snow, and the number of people living in the path of the storm. **Table 4.3.2** illustrates the NESIS values as calculated within a geographical information system (GIS). The aerial distributions of snowfall and population information are combined in an equation that calculates a NESIS score, which varies from around one for smaller storms to over ten for extreme storms. The raw score is then converted into one of the five NESIS categories. The largest NESIS values result from storms producing heavy snowfall over large areas that include major metropolitan centers.

Table 4.3.2 Th	Table 4.3.2 The Northeast Snowfall Impact Scale (NESIS)							
Category	NESIS	Value Description						
1	1 – 2.499	Notable						
2	2.5 - 3.99	Significant						
3	4 - 5.99	Major						
4	6 – 9.99	Crippling						
5	10.0+	Extreme						

Source: Paul Kocin and Louis Uccellini

Table 4.3.3 provides a listing of winter snowstorms impacting New England from 2015 through 2021. The table also ranks the storms on the NESIS scale. Eleven storms were rated as "Crippling" or "Extreme" during this time.

	Table 4.3.3 N	ESIS Data for I	Massachuset	ts (2015-202 ⁻	1)
*Rank	Start Date	End Date	NESIS	Category	Description
48	2015-01-25	2015-01-28	2.62	2	Significant
17	2015-01-29	2015-02-03	5.42	3	Major
64	2015-02-08	2015-02-10	1.32	1	Notable
4	2016-01-22	2016-01-24	7.66	4	Crippling
23	2017-03-12	2017-03-15	5.03	3	Major
53	2018-01-03	2018-01-05	2.27	1	Notable
57	2018-03-01	2018-03-03	1.65	1	Notable
41	2018-03-05	2018-03-08	3.45	2	Significant
45	2018-03-11	2018-03-15	3.16	2	Significant
58	2018-03-20	2018-03-22	1.63	1	Notable
44	2020-12-14	2020-12-18	3.21	2	Significant
24	2021-01-30	2021-02-03	4.93	3	Major

Source: https://www.ncdc.noaa.gov/snow-and-ice/rsi/nesis *Ratings of 66 high-impact storms since 1956

Since the prior MV Regional Multi-Hazard Mitigation Plan, Massachusetts has experienced several extreme Nor'easter events including the following detailed in the 2018 SHMCAP and the NOAA Storm Events database:

- Severe Winter Storm, Snowstorm, and Flooding (FEMA DR4110)—February 8-10, 2013, which resulted in a state of emergency declaration for all counties on April 19, 2013.
- Severe Winter Storm, Snowstorm, and Flooding (FEMA DR-4214) —January 26-29, 2015, with the governor declaring a travel ban on January 27 and Logan International Airport closed through January 28.
- Severe Winter Storm and Flooding (FEMA DR-4372)—March 2-3, 2018 followed less than two weeks later by Severe Winter Storm and Snowstorm (FEMA DR-4379)—March 13-14, 2018 which resulted in a Federal Disaster Declaration on July 19, 2018, for Essex and several other Massachusetts counties.
- Nor'easter October 17, 2019 Heavy rain, strong winds, and flooding left down trees and power lines and closed many roads.
- □ Nor'easter October 27, 2021 Near hurricane winds battered the east coast leaving over 500k without power for several days.

Nor'easters are a high frequency event in Newburyport.

Ice Storms

Ice storms occur when a mass of warm moist air collides with a mass of cold Arctic air. As the less dense warm air rises moisture may precipitate as rain. The rain falls through the colder, denser air and comes in contact with cold surfaces where ice forms. Ice may continue to form until the ice is as much as several inches thick.

Ice storms may strain tree branches, telephone and power lines, and even transmission towers to the breaking point, and often create treacherous conditions for highway travel and aviation. The weight of formed ice (especially with a following wind) may cause power and phone lines to snap and the towers that support them to collapse under the load. The resulting debris-clogged roads can make emergency access, repair, and cleanup extremely difficult.

The December 2008 ice storm in New England and the Merrimack Valley region storm resulted in one fatality and left over one million people without power, some for as long as two weeks. Damage from the storm was measured in millions of dollars in property damage, lost business, and cleanup costs. Many of the expenses incurred were related to the clearing and disposal of downed trees and tree limbs. Given the magnitude of damage, the storm resulted in a Presidential Disaster Declaration.



More recently, the Halloween Nor'easter in 2011, caused billions of dollars in damage along the Eastern Seaboard. In Massachusetts, the ice storm accompanied by wind gusts up to 69 mph was responsible for six deaths and 420,000 power outages.

Ice storms equally as severe have been recorded in New England since 1929. The U.S. Army Corps of Engineers/Cold Regions Research and Engineering Laboratory estimates a 40 – 90-year return period for an event with a uniform ice thickness of between 0.75 and 1.25 inches. In other words, on average, a one-inch ice storm is likely every fifty years.

In Newburyport, Plum Island's electricity, Cable TV and internet communication lines are hung from a single row of utility poles that follow the turnpike from the mainland to Plum Island. The utility lines and poles themselves are vulnerable to wind, snow, and ice as they are set to the side of the roadbed and into the underlying marsh, which is wet and soft, especially when flooded. The substrate where these poles are set will only become softer as sea levels continue to rise.



Ice Jams

Ice jams occur when warm temperatures and heavy rain cause rapid snow melting. The melting snow combined with the heavy rain causes frozen rivers to swell, breaking the ice layer into large chunks that float downstream and pile up near narrow passages or near obstructions such as bridges and dams. Historically, there have been hundreds of ice jams in New England. Although relatively rare in the Merrimack Valley region, ice jams have been recorded on the Merrimack River in the community of Lawrence and on the Spicket River in Methuen. The major hazard associated with an ice jam is flooding.

4.4 Fire Related Hazards

Fire poses a danger to both developed and rural areas of Newburyport, as well as to forested and grassland areas. Wildland fire can be defined as any non-structure fire that occurs in wildland that contains grass, shrub, leaf litter, and forested tree fuels. Three distinct wildland fires have been defined and include wildfire, naturally occurring or human-caused, and prescribed fire. However, as this Plan focuses on natural hazards, the discussion is limited to wildfire/brush fire hazards.

Wildfires

A wildfire is an uncontrolled fire that spreads due to the presence of vegetative fuel. These fires often begin unnoticed and spread quickly. In this area of the country, wildfire season generally begins in March and ends in late November. Human beings start four out of every five wildfires through arson or carelessness. Lightning strikes account for most of the remainder. If heavy rain follows a major wildfire, other natural disasters can occur, including landslides and floods. Once groundcover is burned away, there is little left to

hold soil in place on steep slopes. Water supplies can also be affected. The loss of ground cover materials and the chemical transformation of burned soils can make some watersheds more susceptible to erosion.

A surface fire is the most common type of wildfire, burning slowly along the floor of a forest, destroying or damaging trees. Lightning typically starts a ground fire and burns on or below the forest floor; such fires are difficult to detect and extinguish. Crown fires spread quickly along the tops of trees and are driven by wind. Crown fires are seen when a high-intensity surface fire spreads or "ladders" upward through the lower foliage to the canopy.



The Massachusetts Department of Fire Services/Division of Fire Safety maintains a comprehensive database of all reported fire incidents in the Commonwealth, including wildfires and brush fires. According to statistics compiled by the Massachusetts Fire Incident Reporting System (MFIRS), during the five years from 2014 to 2018, there were 5,245 fires classified as "other fires" in Essex County (i.e., non-structure and non-vehicle fires), the vast majority of which were local brush fires. MFIRS reports 80 "other fires" for Merrimac during that period.

Historically there are more brush fires in April than any other month. Over a ten-year average, there are 24% more brush fires in April than in May, the next busiest month for brush fires according to the Massachusetts Department of Fire Safety.

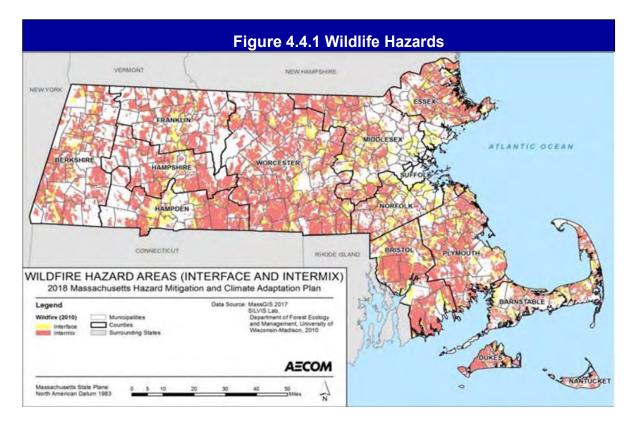
Wildland/Urban Interface

Wildland/urban interface areas exist wherever homes and businesses are built among trees and other combustible vegetation. Such areas are becoming increasingly prevalent throughout the Merrimack Valley region and Newburyport, as development continues to encroach into forest land. The wildland/urban interface problem stems from two different sources of fire and their impact on the community. Fire can move from forest, brush, or pastureland into the community or from the community into adjacent wild areas. In temperate areas, vegetative decay is a slow process, and logs, leave, and evergreen needles pile up on the forest floor. This accumulation of fuel increases the probability of large fires that are difficult to control. Ignitions are more frequent in the wildland/urban interface because of the increased presence of people. Carelessness, recreation use, damaged power lines, and industrial activity all are potential ignition sources.

Wildland/urban interface fires can cause large economic losses and severe social impacts. The impact to residents can include the loss of, or damage to, homes and irreplaceable items, and even death or serious injury. Financial costs include building and infrastructure damage and loss, business disruption, and fire suppression and evacuation costs. While Newburyport responds to several brush fires annually, none have resulted in significant

property damage or death. During MVP planning workshops, stakeholders identified a need for forest management to remove dead and dying trees which might serve as fuel for future fires. March's Hill and Maudsley were areas of concern noted in the 2018 Summary of Findings.³⁴

The following map taken from the 2018 SHMCAP depicts wildlife hazard as "interface" or "intermix."



Wild/brush fires are considered a medium frequency event in Newburyport.

4.5 Geologic Hazards

The Merrimack Valley region is vulnerable to earthquakes and landslides, although both geologic hazards are infrequent.

Earthquakes

In the Northeast, earthquakes are not associated with specific known faults, as they are in California. In New England, the immediate cause of most earthquakes is the sudden release of stress along a fault or fracture in the earth's crust. Much of the research on

³⁴ Summary of Findings, Newburyport Municipal Vulnerability Preparedness Workshop, May 31, 2018. Horsley Witten Group.180531 newburyport mvp report final reduced.pdf(cityofnewburyport.com) Newburyport Multi-Hazard Mitigation Plan 2022 85

earthquakes in the northeast has involved attempts to identify pre-existing faults and other geological features that may be susceptible to such stress, but this has proven to be quite difficult. Unlike the situation in the western part of the country, where many plate boundary earthquakes occur, it is unclear whether faults mapped at the earth's surface in the northeast are the same faults along which earthquakes are occurring.

The magnitude of earthquakes is often measured by the Richter and/or Mercalli scale. The Richter scale measures the energy of an earthquake by determining the size of the greatest vibrations recorded on the seismograph, an instrument which records details of earthquakes such as force and duration. On this scale, earthquakes under 3.5 in magnitude are generally not felt, while earthquakes over 8 in magnitude bring serious destruction. One step up in magnitude (5.0 to 6.0 for example) increases the energy more than 30 times. Similarly, the Mercalli scale measures earthquakes via a twelve-point scale, where I is not felt and VII is catastrophic. This scale does not have a mathematic basis and is instead based on observable effects. Tables 4.5.1 and 4.5.2 show the Richter and Mercalli scales respectively.

Figure 4.5.1 Richter Scale Magnitudes and Effects

Magnitude	Effects
< 3.5	Generally not felt, but recorded.
3.5 - 5.4	Often felt, but rarely causes damage.
5.4 - 6.0	At most slight damage to well-designed buildings. Can cause major damage to poorly constructed buildings over small regions.
6.1 - 6.9	Can be destructive in areas up to about 100 kilometers across where people live.
7.0 - 7.9	Major earthquake. Can cause serious damage over larger areas.
8 or >	Great earthquake. Can cause serious damage in areas several hundred kilometers across.

From https://www.mtu.edu/geo/community/seismology/learn/earthquake-measure/

Figure 4.5.2 Mercalli Scale Intensity and Description

From: https://www.usgs.gov/programs/earthquake-hazards/modified-mercalli-intensity- scale

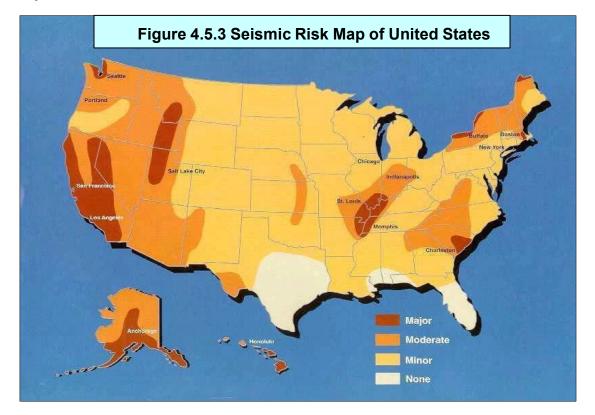
Intensity	Shaking	Description/Damage
I	Not felt	Not felt except by a very few under especially favorable conditions.
11	Weak	Felt only by a few persons at rest, especially on upper floors of buildings.
ш	Weak	Felt quite noticeably by persons indoors, especially on upper floors of buildings. Many people do not recognize it as an earthquake. Standing motor cars may rock slightly. Vibrations similar to the passing of a truck. Duration estimated.
IV	Light	Felt indoors by many, outdoors by few during the day. At night, some awakened. Dishes, windows, doors disturbed; walls make cracking sound. Sensation like heavy truck striking building. Standing motor cars rocked noticeably.
v	Moderate	Felt by nearly everyone; many awakened. Some dishes, windows broken. Unstable objects overturned. Pendulum clocks may stop.
VI	Strong	Felt by all, many frightened. Some heavy furniture moved; a few instances of fallen plaster. Damage slight.
VII	Very strong	Damage negligible in buildings of good design and construction; slight to moderate in well-built ordinary structures; considerable damage in poorly built or badly designed structures; some chimneys broken.
VIII	Severe	Damage slight in specially designed structures; considerable damage in ordinary substantial buildings with partial collapse. Damage great in poorly built structures. Fall of chimneys, factory stacks, columns, monuments, walls. Heavy furniture overturned.
(8	Violent	Damage considerable in specially designed structures; well-designed frame structures thrown out of plumb. Damage great in substantial buildings, with partial collapse. Buildings shifted off foundations.
	Extreme	Some well-built wooden structures destroyed; most masonry and frame structures destroyed with foundations. Rails bent.

It is impossible to predict the time and location of future earthquakes in New England. The United States Geological Survey (USGS) has produced a series of earthquake hazard maps for the United States. These maps show the amount of earthquake- generated ground shaking that is predicted to have a specific chance of being exceeded over a certain period. Ground shaking caused by earthquakes is often expressed as a percentage of the force of gravity. Due to the difficulty of identifying specific seismically active geological features in the Northeast, the level of seismic hazard is based primarily on past seismic activity. These maps generally show that there is a 1 in 10 chance that in any given fifty-year period a potentially damaging earthquake will occur.

Essex County in Massachusetts is at moderate risk to the threat of an earthquake. Moderate risk means that there is a relatively long period between strong earthquakes. Between 1627 and 1989 there were 316 earthquakes recorded in Massachusetts. From 1924-1989 there were eight earthquakes with a magnitude of 4.2 or greater in New England. According to the Weston Observatory, the last earthquake to hit the New England Region with a magnitude of 3.0 or greater occurred on September 26, 2010, in the area of Contoocook, New Hampshire. New England experiences 30-40 earthquakes each year, although most are not felt. Potential earthquake losses total \$4.4 billion annually in the United States, with the Northeast ranking third in the nation for annualized losses, according to FEMA. The \$4.4 billion estimate includes only losses to buildings and business interruption; it does not include damage and losses to critical facilities, transportation infrastructure, and services, utilities, or indirect economic losses.

An area's vulnerability to a devastating earthquake is based primarily on two elements: the density of the population in the region, and the age of the region's buildings, and the lack of earthquake-proof design. Additionally, seismic waves travel further in the eastern *Newburyport Multi-Hazard Mitigation Plan 2022*87

U.S. than in other parts of the country. Seismologists have determined that the likelihood of an earthquake with a magnitude of 5.0 or greater in the New England area is 41-56% by the year 2043.



Earthquake magnitude is measured on two scales, the Richter Scale and the Mercalli Scale. The Richter Scale (expressed as "mb") is an open-ended logarithmic scale that measures the amount of energy released by an earthquake. An earthquake registering 1.5mb on the Richter Scale represents that point at which some disturbance may be felt. At 4.5mb slight damage may be caused. An 8.5mb is considered a devastating earthquake. The Mercalli Scale is measured on a scale of I to XII and expresses more directly the damage caused by an earthquake. A Scale I earthquake on the Mercalli Scale would barely be felt, whereas a Scale XII quake would destroy all buildings. The intensity of the quake is evaluated according to observations at specific locations.

Ground movement during an earthquake is seldom the direct cause of injury or death. Collapsing walls, falling objects, and flying glass cause most casualties. Buildings with foundations resting on unconsolidated landfills, old waterways, or other unstable soils are most at risk. Buildings, trailers, and manufactured homes not tied to a reinforced foundation anchored to the ground are also at risk since they can be shaken off their mountings during an earthquake. In the eastern part of the U.S., a magnitude 5.5 earthquake can be felt as far as 300 miles from where it occurred and can cause damage out to 25 miles from the epicenter.

Based on records, the maximum experienced earthquake intensities on the Mercalli Scale Newburyport Multi-Hazard Mitigation Plan 2022 88

in Essex County have been in the range of VI (where there is damage to objects indoors, the tremor is felt by all people indoors and outdoors, movement is unsteady, moderately heavy furniture moves, and pictures fall off walls) to VII (where there is damage to architecture, the tremors are frightening, it is difficult to stand, cracks occur in chimneys and plaster, bricks may fall, and stream banks may cave in).

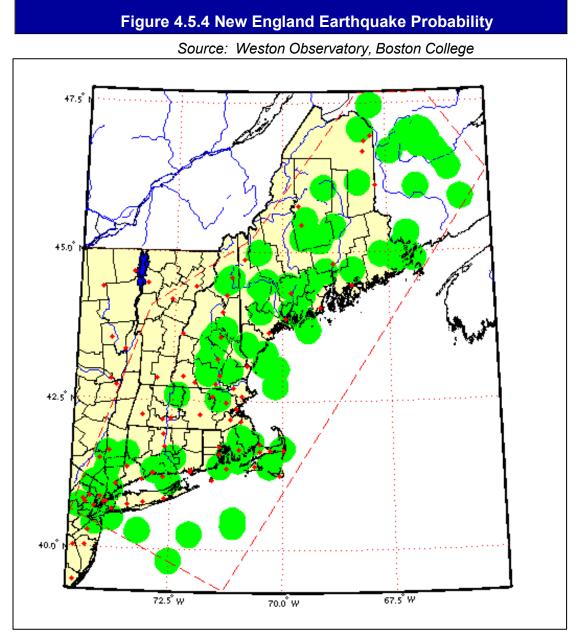


Figure 4.5.4 above shows the results of an earthquake probability analysis conducted by the Weston Observatory at Boston College. The study examined earthquake activity of magnitude greater than 2.7 between 1975 and 1998. According to the analysis, there is a 66% chance that the next earthquake of magnitude greater than 2.7 will occur in the green areas shown on the map above. A record of all seismic activity in the Northeast can be found at the following link on the Weston Observatory website: LatestNewEnglandEarthquakes(bc.edu).

Failure to design structures with earthquakes in mind will also affect the potential damage caused by an earthquake. Regulations that require buildings and structures to meet some minimum seismic criteria were only recently put in place. Newburyport complies with the most recent version of the state Building Code.

Tsunamis

A tsunami is characterized by a series of extreme waves with elongated wavelengths that can move hundreds of miles per hour in the open ocean and move onshore with waves of 100 feet or greater. Tsunamis are normally caused by geologic activity (earthquakes, volcanic activity) or other natural events (landslides, glacier calving, meteorites) which trigger underwater disturbances. Unlike wind-driven waves, tsunamis move through the entire water column. As the waves travel inland and reach shallow water, their speed decreases, and their height increases. According to NOAA, when tsunamis hit land, most are less than 10 feet in height, but in extreme cases, can be greater than 100 feet. These extreme tsunamis can devastate coastal communities and cause flooding in low-lying coastal areas.

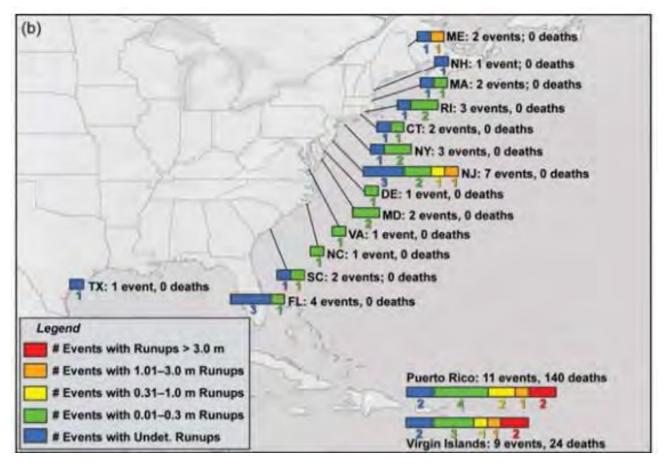


Figure 4.5.5 Total number of tsunami events that have occurred in the Atlantic Ocean with run-up heights of 0.01-3.0 meters (Dunbar and Weaver 2015).

Hazard Location: While all of coastal Massachusetts is exposed to the threat of tsunamis, the Atlantic Coast of the United States has experienced very few tsunamis in the last 200

years (Figure 4.5.5). According to NOAA, the majority of the tsunamis occur in the Pacific Ocean, which accounts for 71% of all world occurrences. Most tsunamis (78%) have been caused by earthquakes, with destructive tsunamis occurring after a 7.5 magnitude earthquake or greater (Source: International Tsunami Information Center). While Essex County Massachusetts is at a moderate risk for earthquakes, the state has only experienced two severe earthquakes in its recorded history (intensity IV in 1668 and magnitude 6.0 in 1755).³⁵ The Maine Geological Survey identifies convergent margins as conditions in which earthquakes are most likely to occur. In Massachusetts, the closest tectonic boundary is the divergent Mid-Atlantic plate, which is less likely to trigger earthquakes. Within the Atlantic Coast, US states and Territories closer to the convergent plate boundary in the Caribbean Sea or the volcanic island-arc in the Canary Islands are at greater risk for tsunami occurrence. As Massachusetts is far from both of these locations, the risk is considerably lower.

Previous Occurrences and Severity: According to the NOAA Storm Events Database, no tsunamis have been reported in Massachusetts since tracking begin in 1950 and no Presidential Disaster Declarations have been made for tsunamis in the state.³⁵ In their study, Dunbar and Weaver (2015) report only two small tsunami events that have occurred in Massachusetts since recording begin in the 1800s, with neither considered significant events.³⁶

According to the <u>2018 Massachusetts State Hazard Mitigation and Climate Adaptation Plan</u>, the frequency of tsunamis is influenced by the frequency of the events that cause them (seismic, volcanic, or landslide activity). Therefore, the probability of future tsunamis in Newburyport is low to very low based on historical data and the frequency of causal activities.³⁷ However, while the likelihood of a damaging tsunami in Massachusetts is low compared to other hazards, the impacts could be high. The 2018 Massachusetts State Hazard Mitigation and Climate Adaptation Plan (SHMP) references a 1-mile coastal buffer which was established as part of the 2013 SHMP to define the geographic extent of tsunami hazards in the state. This buffer will be updated once modeling and inundation mapping are completed. Areas of Newburyport fall within this buffer zone and are considered vulnerable locations were a tsunami to occur.

Climate change: The effect of climate change on tsunamis is unclear, however, early studies suggest that it will contribute to increased tsunami occurrence and severity.³⁸ This will primarily occur due to increased temperatures melting ice cover which in turn will reduce downward pressure on the earth's crust, allowing the crust to rise and triggering earthquakes and underwater landslides. Additionally, collapsing glaciers on the surface of the water may also cause landslides, resulting in tsunami events. Heightened sea-level could further exacerbate the severity of tsunami events for low-laying coastal communities.

³⁵ National Oceanic and Atmospheric Administration, National Centers for Environmental Information, Storm Events database. http://www.ncdc.noaa.gov/stormevents/

³⁶ Dunbar and Weaver (2015). U.S. States and Territories National Tsunami Hazard Assessment: Historical Records and Sources for Waves-Update. NOAA Report

³⁷ Massachusetts SHMCAP, September 2018

³⁸ McGuire.2010. *Potential for a Hazardous* Geospheric *Response to Projected Future Climate Change. Royal Society* 368:119.

Landslides

A landslide is the downward movement of a slope and its materials under the force of gravity. Human activity such as construction and mining, and natural factors such as topography, geology, and precipitation influence landslides. Landslides often develop when water rapidly accumulates in the ground, such as during periods of heavy rainfall or rapid snowmelt. Other factors contributing to a landslide include earthquakes and erosion by rivers and streams. Construction-related failures related to road cuts and trenching can also occur.

Nationally, landslides constitute a major geologic hazard, as they are widespread, occurring in every state, cause an estimated 25 fatalities annually, and result in \$1-2 billion in property damage each year. Landslides are common throughout New England but are generally limited to mountainous or hilly terrain. Newburyport and the Merrimack Valley region are considered to be at very low risk for this type of natural hazard. The SHMCAP identifies a very small portion of the population (2010 Census) in Essex County vulnerable to unstable slopes that may be more prone to landslides (SHMCAP 4-68).

	Table	e 4.5.1 201	0 Populat	tion in Uns	table Slop	e Areas		
County	Population	Unstabl	e Areas	Moderatel	y Unstable	Low Instability		
	Population -	Number	% Total	Number	% Total	Number	% Total	
Essex	743,159	290	0.0	7,708	1.0	13,739	1.8	

Source: 2010 U.S. Census, Slope Stability Map, 2017

4.6 Heat Waves/Extreme Heat

A heat wave is three consecutive days during which the air temperature reaches or exceeds 90 degrees Fahrenheit on each day. Temperatures that hover ten degrees or more above the average high for the region and last

for several weeks are defined as extreme heat. Humid or muggy conditions, which add to the discomfort of high temperatures, occur when a dome of highpressure traps hazy, damp air near the surface.

Heat kills by pushing the human body beyond its limits. Most heat disorders occur because the victim has been overexposed to heat or has over-exercised for his or her age and physical condition. The most severe heat-induced illnesses are heat exhaustion and



heatstroke. If left untreated, heat exhaustion can progress to heatstroke and possible

death. Young children, the elderly, and those with existing illnesses are more likely to become victims. Other conditions that can cause heat-related illness include stagnant atmospheric conditions and poor air quality.

Extremely hot temperatures associated with heat waves are measured through the Heat index Scale, which combines relative humidity with actual air temperature to determine the risk to humans. The National Weather Station (NWS) issues an excessive heat warning when the daytime heat index is forecasted to reach 105°F for 2 or more hours,

95°F-99°F for 2 or more hours over 2 consecutive days, or 100°F-104°F for 2 or more hours over.1 day. Further, the NWS defines a heat wave as 3 or more days of 90°F temperatures. Figure 4.6.1 indicates the relationship between heat index and relative humidity.

Figure 4.6.1 NSW Heat Index

	80	82	84	86	88	90	92	94	96	98	100	102	104	106	108	110
40	80	81	83	85	88	91	94	97	101	105	109	114	119	124	130	136
45	80	82	84	87	89	93	96	100	104	109	114	119	124	130	137	
50	81	83	85	88	91	95	99	103	108	113	118	124	131	137		
55	81	84	86	89	93	97	101	106	112	117	124	130	137			
60	82	84	88	91	95	100	105	110	116	123	129	137				
65	82	85	89	93	98	103	108	114	121	128	136					
70	83	86	90	95	100	105	112	119	126	134						
75	84	88	92	97	103	109	116	124	132							
80	84	89	94	100	106	113	121	129								
85	85	90	96	102	110	117	126	135							-	-
90	86	91	98	105	113	122	131								n	RRC
95	86	93	100	108	117	127										Z
100	87	95	103	112	121	132										
							s with	Prolo	nged E	Exposi	ure or	Strenu	ious A	ctivity	'	

from https://www.weather.gov/safety/cold-wind-chill-chart

Heat waves cause more fatalities in the U.S. than the total of all other meteorological events combined. Recent statistics indicate that approximately 200 deaths per year are attributable to heatstroke. In 1980, high summer temperatures in central and southern States caused an estimated 1,700 excess deaths directly attributable to the heat. In July 1995, a heat wave in the mid-west caused 670 deaths, 375 in the Chicago area alone. In Essex County, July 1, 2018, an area of high pressure over the Eastern USA brought hot

and very humid air to Southern New England on July 1st. Heat Index values of 105 to 109 occurred in parts of Eastern and Northwestern Massachusetts. Heat Index values in much of the state reached 95 to 104.³⁹

High cooling demands also increase the risk of utility blackouts as transmission systems are stretched to their limits. The occurrence of a heat wave in combination with a loss of air conditioning due to a blackout could have serious consequences for confined senior citizens and other at-risk populations in Newburyport. Extreme heat is considered a high-frequency event in Newburyport.

Drought

Drought is a normal recurrent feature of climate, occurring in virtually all climate zones. Drought originates from a deficiency in precipitation over an extended period, typically two winter seasons or more. Drought should be considered relative to the long-term average condition based on precipitation and evapotranspiration.

The first evidence of drought is usually seen in rainfall records. Within a short period, soil moisture can begin to decrease. The effects on stream and river flow, or water levels in lakes and reservoirs, may not be noticed for several weeks or months. Water levels in wells may not be impacted for a year or more after a drought begins.

The severity of a drought determines the scale of the event, which is categorized by the National Drought Mitigation center on a D0-D4 scale as shown in table 4.6.2.

Table 4.6.1 Drought Monitor Scale

From https://droughtmonitor.unl.edu/About/AbouttheData/DroughtClassification.aspx

Classification	Category	Description
DO	Abnormally Dry	Going into drought: short-term dryness slowing planting, growth of crops or pastures. Coming out of drought: some lingering water deficits; pastures or crops not fully recovered
DI	Moderate Drought	Some damage to crops, pastures; streams, reservoirs, or wells low, some water shortages developing or imminent; voluntary water-use restrictions requested
D2	Severe Drought	Crop or pasture losses likely; water shortages common; water restrictions imposed
D3	Extreme Drought	Major crop/pasture losses; widespread water shortages or restrictions
D4	Exceptional Drought	Exceptional and widespread crop/pasture losses; shortages of water in reservoirs, streams, and wells creating water emergencies

³⁹ StormEventsDatabase-EventDetails|NationalCentersforEnvironmentalInformation(noaa.gov)

Massachusetts is generally considered to be a water-rich state, receiving an average of 45 inches of precipitation each year. This region can experience extended periods of dry weather, from single-season events to multiyear events, such as occurred in the mid-1960s. Historically, droughts in Massachusetts have started with dry winters, rather than dry summers.

A serious drought occurred in Massachusetts during the spring and summer of 1999.



Cumulative precipitation deficits reached 8-12 inches below normal over one year. Stream flows routinely fell below the 25th percentile of historical flows for the month. Groundwater levels were also below normal throughout the summer over nearly the entire state. During this period, the Massachusetts Emergency Management Agency developed a Massachusetts Drought Management Plan. The Plan includes groundwater data, surface water data, reservoir data, precipitation data, and streamflow conditions, as well as a report on fire danger and agricultural conditions. The Drought Management Plan provides specific action items to be implemented during a drought watch, drought warning, or drought emergency. A drought emergency is one in which state-mandated water restrictions, or the use of emergency supplies is necessary. The Plan underwent minor updates and was formally adopted in 2013.

In the subsequent 2016/2017 Drought, the most severe in Massachusetts since the 1960s, the 2013 Plan was implemented but was followed by an in-depth review of the previously developed indices by the Drought Management Task Force. This review resulted in a substantial update to the Plan. This included a change in methodology for calculating the indices and for calculating the thresholds for drought levels as well as the introduction of new and substantially updated actions for local and state government.⁴⁰ Unlike most droughts, which are slow-developing and long-lasting, the drought of 2016-2017, developed rapidly with conditions declining quickly from one month to the next which resulted in a new concept of "flash drought".

Massachusetts has experienced multi-year drought episodes in 1879-1873, 1908-1912, 1929-1932, 1939-1944, 1961-1969, and 1980-1983. Recently, in September of 2020, all seven regions of the Commonwealth were in Level 2 – Significant Drought status. In February 2019, the Newburyport Department of Public Services (DPS) proposed to continue funding a Water Supply Resiliency Plan as part of the city's Capital Improvement Project. This plan was originally funded for FY19, but additional monies are being sought to expand its scope. Additionally, a Capital Improvement Project has been proposed to update the Artichoke Watershed Protection Plan originally prepared by Weston and

⁴⁰ EOEEA & MEMA. 2019. Drought Management Plan.

Sampson in January of 2005. The city's surface water supply is largely unprotected as the reservoirs lie outside of Newburyport in West Newbury, and they are largely bordered by private property. The Department of Environmental Protection (DEP) has designated buffer zones around these public water supplies and abutting properties must comply with the regulations for these zones. However, concerns about future drought and additional heavy precipitation runoff have prompted the city to update its watershed protection plan.

Drought is considered a medium-frequency event in Newburyport.

4.7 Climate Change

Climate change is expected to alter the frequency and severity of weather-related natural hazards, increasing Newburyport's vulnerability to such hazards. During the period of 2015-2019, Newburyport completed four studies to assess its vulnerability to the impacts of climate change. The Climate Resiliency Plan (1/27/2020) summarizes these efforts and details climate change hazard and identifies adaptation strategies and recommendations to minimize its risk exposure. Using this Plan and Newburyport's MVP Summary of Findings, the following section will highlight the effects of climate on Newburyport's top hazards of concern, including sea level rise, severe winter and coastal storms, heavy precipitation, extreme temperatures, and drought.

Sea Level Rise

Rising temperatures have contributed to thermal expansion of the ocean and an influx in fresh water from melting glaciers, resulting in greater than 8 inches of increase in global sea level rise since 1950. In addition to thermal expansion and ice sheet melt, sea level is rising more quickly along the east coast than elsewhere due to the additional influence of land subsidence in response to land-based ice sheets melting at the poles and fluctuations in the speed of the nearby Gulf Stream.

Sea level rise (SLR) projections are all based on those developed by NOAA through the U.S. Interagency Sea Level Rise Task Force which was charged with developing Global Sea Level Rise scenarios for the 2018 National Climate Assessment.⁴¹ Differences among sea level rise scenarios are based upon emissions assumptions and local factors. Output from the Interagency SLR report was used by the Boston Research Advisory Group (BRAG) to develop regional sea level rise scenarios for Boston.⁴² Due to the influence of regional-scale processes such as land subsidence, variations in the speed of the Gulf Stream, and the gravitational effect of melting ice sheets, Regional Sea Level Rise (RSLR) in Boston will likely exceed the global average throughout the 21st century, regardless of which emissions trajectory is followed. BRAG's RSLR projections for Boston are applicable to Newburyport not only because of geographic proximity (Boston lies only some 30 miles to the south), but also because an extensive panel of experts incorporated a suite of regional and global scale processes into the Global Sea

⁴¹ Sweet, et al. 2017. Global and Regional Sea Level Rise Scenarios for the United States. NOAA Report.

⁴² The BRAG Report. 2016. Climate Change and Sea Level Rise Projections for Boston.

Level Rise data used by the 2018 National Climate Assessment to develop RSLR projections for Boston.

Subcommittee members of the Newburyport Resiliency Committee evaluated data from these two sources to conclude that (relative to year 2000) sea level rise of 6 feet was possible locally by the year 2100. Figure 4.7.1 Sea Level Rise Progression for Newburyport, depicts sea level rise projections for Newburyport during the period 2000-2010.

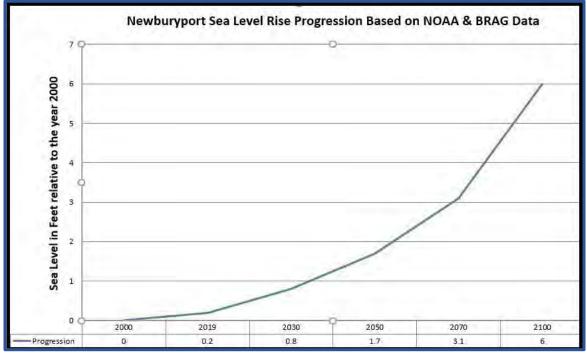


Figure 4.7.1 Sea Level Rise Progression for Newburyport

In Newburyport and the Merrimack Valley's other coastal and estuarine communities, increases in sea level rise poses severe consequences for both natural and man-made systems. Sea level rise will increase the height and negative impact of storm surges and associated coastal flooding frequencies, permanently inundate low-lying coastal areas (including commercially valuable shellfish beds), amplify shoreline erosion, and threaten barrier beach and dune systems. This risk also carries financial implications. A study was conducted in 2021, results of which are still considered draft, that assessed the fiscal and economic risk of sea level rise on Plum Island, a barrier beach system in Newburyport. Results indicate that while Plum Island currently has a positive net fiscal and economic impact to the City of Newburyport (~\$3 million annually), the impact is expected to decline by 2050 without intervention.⁴³ Financially, flooding and erosion is expected to cause frequent damage to properties, reducing property values and decreasing fiscal benefits. Economically, these same factors will limit access and habitability on Plum Island, reducing activity and decreasing economic benefits. The report highlights the positive impact that early intervention of climate investments (such as maintaining primary access across the Plum Island Turnpike) can have to keep the island accessible for numerous island homes

⁴³ Horsley Whitten Group. 2021. Plum Island: Exploring the Fiscal and Economic Implications of Sea Level Rise. URL: https://www.mass.gov/doc/final-report-29/download Newburyport Multi-Hazard Mitigation Plan 2022

and their residents and sustain fiscal and economic benefits of the barrier beach system for as long as possible. Early investments in public infrastructure, such as access roads, can take advantage of the time remaining before floods become overwhelmingly impactful and the cost of maintaining infrastructure on the island is no longer financially feasible. The report does highlight that this action is not a long-term solution in the face of sea level rise, but rather that it will buy time for the community and allow for a gradual adaptation to new fiscal and economic realities. To proactively pursue climate adaptation strategies in Newburyport, additional collaboration, innovation, and funding will be needed.

Severe Winter Storms, Nor'easters, and Coastal Storms

According to the Fourth National Climate Assessment issued in 2018, heavy precipitation events in most parts of the United States have increased in both intensity and frequency since 1901. There are important regional differences in trends, with the largest increases occurring in our northeastern United States.

The frequency and intensity of heavy precipitation events in Newburyport and the Merrimack Valley are projected to continue to increase throughout the 21st century. The northern United States, including New England, is projected to receive more intense precipitation in the winter and spring, while parts of the southwestern United States are projected to receive less precipitation in those seasons. Winter precipitation (generally in the form of rain) is expected



to increase by 12% to 30%, while the number of snow events is expected to decrease.⁴⁴ While more winter precipitation is likely to fall as rain than snow, historical data show that the frequency of extreme snowstorms in the U.S. doubled between the first half of the 20th century and the second.⁴⁵ Consequences of more extreme storm events include infrastructure failures, disruptions to local economies, and increased public safety risks with more demands on local government and first responder capacity.

Storms of heavy winds and rain along with severe winter storms are the most frequent naturally occurring hazard in Massachusetts. With climate change, the intensity and frequency of these storms will rise. Nor'easters have caused major tree damage, flooding, and infrastructure disruption to Merrimac, memorably in October 2017 and March 2018 when storms precipitated road closures and extended power outages throughout the region. The shift toward more rainy and icy winters would have serious implications in terms of possible damaging ice storms, similar to the storm that severely impacted the region in December 2008.

The accumulation of heat in our oceans and atmosphere represents a reservoir of energy for storms to capitalize upon. A warmer ocean produces more water vapor and convection, and a warmer atmosphere can hold more water and thus deliver more rain and snow.

⁴⁴ EEOEA & the Adaptation Advisory Committee. 2011. Massachusetts Climate Adaptation Report.

⁴⁵ Massachusetts SHMCAP. 2018

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Changes to our jet stream favor extra-tropical (northeasters) and tropical storm development, as well as the creation of slow-moving storms such as Hurricanes Harvey in August 2017 and Florence in September 2018. Moreover, in response to the polar jet stream weakening and retreating during the summer months, the tropical storm track is expected to shift northward to include New England.

While there is debate as to the absolute change in number of tropical storms during any given year, once the meteorological variables align, development of these tropical storms is rapid and intense. This was observed with Hurricanes Humberto (2007), Mathew (2016), Harvey (2017), Maria (2017), and Florence (2018), for example.

Newburyport is in the mid-latitudes of the northern hemisphere. As presented the figure below, the frequency and intensity of mid-latitude storms (extra-tropical or northeasters for example) has been on the rise since at least 1950.

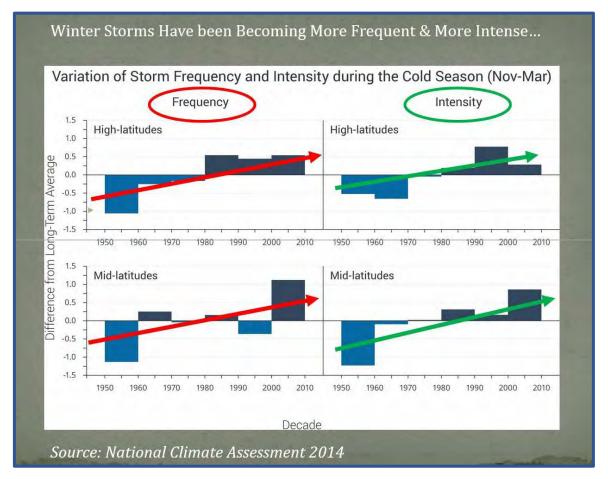


Figure 4.7.2 Frequency and Intensity of Winter Storms

Heavy Precipitation Events & Inland Flooding

The risk of flooding events is heightened by the effects of climate change which portends higher precipitation levels in winter/spring seasons and more frequent, intense storms. Between 1958 and 2012, the Northeast saw more than a 70% increase in the amount of rainfall measured during heavy precipitation events, more than in any other region in the United States. The parameters of the so-called 100-year storm are changing. In the 1960s, a 24-hour event that produced 6.5 inches of rain was categorized as a 100- year storm. By 2015, the threshold for the 100-year storm (i.e.,



storm with 1% occurrence odds in any year) was 8.4 inches of rain over 24 hours.⁴⁶

Further, more winter rain is expected to cause more high-flow and flooding events during the winter, earlier peak flows in the spring, and extended low-flow periods in the summer months. Such hydrologic changes would impact water resources, including an increase in flooding, pollutant-laden overflows from stormwater and wastewater systems during high periods of flow and increased stress on surface and groundwater drinking sources during periods of low flow or drought.

Newburyport is located at the mouth of the Merrimack River, where it discharges into the Atlantic Ocean. Newburyport also includes a portion of the barrier island, Plum Island, and the back marsh system that has formed just south of the mouth of the Merrimack, as well as a portion of the Little River watershed, which discharges behind Plum Island. Considering this geography together with sea level rise, climate enhanced storm activity, and more frequent heavy precipitation events, flooding is very much a short and long- term hazard for Newburyport. Flooding in Newburyport is influenced by three primary factors:

- 1. precipitation and the resulting runoff
- 2. sea level rise
- 3. storm surge

Independently, each variable can cause flooding. When combined, flooding can be extreme. Floods caused by high-intensity precipitation, and exacerbated by other factors, will impact the region and the state. Should these events occur with greater frequency as many climate experts predict, future damage may be severe and cumulative, straining local and state resources. Extreme weather events can disrupt power, limit access to safe and nutritious food, damage property, and impact health care services.

Extreme Temperatures

Massachusetts' climate is changing – nineteen of the 20 warmest years all have occurred since 2001, according to the NASA climate change website. Average global temperatures

⁴⁶ NOAA. Atlas 14 Precipitation Frequency Atlas of the United States & Technical Paper # 40, U.S. Dept. of Commerce. <u>https://hdsc.nws.noaa.gov/hdsc/pfds/pfds_map_cont.</u>

have risen steadily in the last 50 years.⁴⁷ Ambient temperature has increased by approximately 1.8°F from 1970 through the first decade of the 21st century and sea surface temperature has increased by 2.3° F. These warming trends have also been associated with more frequent days with temperatures above 90°F, reduced snowpack, and earlier snowmelt and spring peak flows.⁴⁸ The Intergovernmental Panel on Climate Change predicts that, by the end of the century, Massachusetts will experience a 5° to 10°F increase in average ambient temperature, with several more days of extreme heat during the summer months. From 1971 to 2000, the Merrimack Valley annually had an average of seven days with temperatures above 90 °F. By the end of the century, Merrimac and the region are projected to have fourteen (14) to as many as fifty- six (56) more days per year with temperatures rising above 90 degrees.

Higher temperatures will have a negative effect on air quality and human health. Increased rates of respiratory illness, worsening of allergies and asthma, increased vector-borne diseases, and degraded water quality are expected. With higher temperatures, electricity demand in Massachusetts could increase by 40% in 2030. Total heating degree days will be 15-37% lower, but cooling degree days are projected to triple by the century's end, requiring significant investment in peak load capacity and energy efficiency measures.⁴⁹

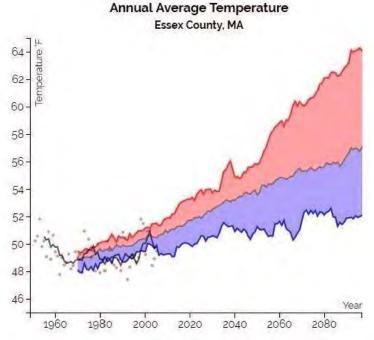


Figure 4.7.3 Northeast Climate Adaptation Science Center

Drought

⁴⁷ NASA. 2021. Global Temperatura. <u>https://climate.nasa.gov/vital-signs/global-temperature/</u>

 ⁴⁸ Frumhoff, et al. 2006. Climate Change in the U.S. Northeast: A Report of the Northeast Climate Change Impacts Assessments, Union of Concerned Scientists, Cambridge, MA.
 ⁴⁹ Ibid.

Higher summer temperatures, less summer precipitation, and an increase in drought frequency will impact water quality and quantity. Intermittent streams will cease flowing earlier in the season and some cold-water habitat will be replaced with warm water habitat. As discussed above, average summer and fall temperatures in the Merrimack River Basin could increase 12° F by the century's end. The annual number of extreme heat days greater than 90°F is expected to increase by as much as 32 more days in 2050.⁵⁰ Extended heat waves could significantly impact public health as well as infrastructure, economic systems including agriculture and ecosystems of forests and wetlands. As higher temperatures lead to greater evaporation and earlier snowmelt, the frequency and intensity of droughts are predicted to increase in summer and fall in the Northeast.⁵¹

Also, for summer and fall seasons, data projections are showing variable precipitation levels with the potential for a moderate change in the number of consecutive dry days (less than 1 mm precipitation). The 1971 to 2000 baseline is 17 on average annual consecutive dry days and that is projected to increase by 3 days by the end of this century.⁵² Less winter snowpack, the result of more winter precipitation falling as rain, combined with earlier spring melt, may fail to adequately recharge groundwater aquifers.

Summary

Given the known natural hazard risks and the projected impacts of climate change, there are several reasons to integrate hazard mitigation and climate change adaptation. First, the decisions and choices made today will shape Newburyport's future and impact its ability to be resilient. Second, since significant time is required to develop adaptive strategies and implementation capacity, acting now will allow the time needed for Newburyport to work toward achieving long-term adaptation goals. Third, proactive planning is far less costly than reacting and responding to a disaster created by a hazard that has been exacerbated by the effects of climate change.

There are similar vulnerabilities across ecosystems based on projected temperature changes, increased storm intensity, precipitation changes, drought, and sea-level rise. Different organisms have different rates of response to climate change. It is expected that climate change will cause changes in species composition and forest structure. Climate change, in conjunction with other stressors, will alter forest function and its ability to provide wildlife habitat and could reduce the ability of forests to provide ecological services such as air and water cleansing. Also, the negative impacts of invasive species may increase, as native forests are increasingly stressed. In general, adaptive strategies for natural resources and habitats include land and water protection, land and water resource management, regulation changes, and increased monitoring.

⁵⁰ University of Massachusetts Amherst, <u>http://www.resilientma.org/resources/resource::2152</u> National Climate Science Center. 2018. Climate Change Projections.

http://www.resilientma.org/resources/resource:2152

⁵¹ Massachusetts Emergency Management Agency. 2018. Massachusetts State Hazard Mitigation and Climate Adaptation Plan. https://www.mass.gov/files/documents/2018/09/17/SHMCAP-September2018-Chapter4.pdf
⁵² Ibid.

To help protect existing structures and minimize or prevent exposure from natural hazards exacerbated by climate change, sound land-use decisions should be promoted through review and updates to local bylaws and regulations. Hazard mitigation, evacuation, and emergency response plans should also be evaluated and updated to reflect changing climate conditions and new development patterns.

B. Risk Analysis and Vulnerability

The City of Newburyport's local planning team's risk analysis reviewed potential hazard events and based on frequency, intensity, and potential impact to the community categorized potential hazards as high, moderate-high, moderate, low-moderate, or low risk to the community. The Core Team utilized the definitions based on the Commonwealth of Massachusetts (prior) State Hazard Mitigation Plan (2013) as follows:

Frequency:

- Very low frequency: events that occur less frequently than once in 100 years (less than 1% per year).
- Low frequency: events that occur from once in 50 years to once in 100 years (1% to 2% per year).
- Medium frequency: events that occur from once in 5 years to once in 50 years (2% to 20% per year).
- □ High frequency: events that occur more frequently than once in 5 years (Greater than 20% per year).

Severity: extent or magnitude of a hazard, as measured against an established indicator

- Minor: Limited and scattered property damage; limited damage to public infrastructure and essential services not interrupted; limited injuries or fatalities.
- Serious: Scattered major property damage; some minor infrastructure damage; essential services are briefly interrupted; some injuries and/or fatalities.
- Extensive: Widespread major property damage; major public infrastructure damage (up to several days for repairs); essential services are interrupted from several hours to several days; many injuries and/or fatalities.
- Catastrophic: Property and public infrastructure destroyed; essential services stopped; numerous injuries.

Based on this analysis, Newburyport considers itself to be at *high risk* from flooding, coastal erosion, winter storms (blizzards/snow/ice storms), Nor'easters, and extreme temperatures; *moderate risk* from hurricanes, drought, earthquakes, and brush fires; *low risk* from tornados, dam failure, tsunamis, and landslides.

Table 4.B.1 Newburyport Natural Hazards Risk Assessment

Hazard	Frequency	Severity
Flooding	High	Minor to Extensive
Coastal Erosion	High	Minor to Serious
Winter Storms (blizzard/snow/ice)	High	Minor to Extensive
Nor'easters	High	Minor to Extensive
Severe Thunderstorms	High	Minor to Serious
Extreme Temperatures	High	Minor to Serious
Hurricanes	Medium	Serious to Catastrophic
Drought	Medium	Minor to Serious
Earthquakes	Medium	Minor to Extensive
Forest/Brush Fires	Medium	Minor to Serious
Tornadoes	Low	Minor to Extensive
Dam Failure	Low	Minor to Catastrophic
Tsunami	Low	Minor to Catastrophic
Landslides	Low	Minor

Overview of Natural Hazards Vulnerability

Prior sections of this Multi-Hazard Mitigation Plan identify and describe the natural hazards that have occurred, or are most likely to occur, in Newburyport and the Merrimack Valley region. Since 1991, there have been 26 Presidential disaster declarations that included Essex County, as summarized in **Table 4.B.2.** Since 2014, when the region's last Hazard Mitigation Plan was prepared, there have been three additional Presidential disaster declarations in Essex County, two of which were the result of severe winter storms with flooding and the third being the ongoing COVID-19 pandemic. The vulnerability and risk assessment for Newburyport has been based on the frequency of disasters, data provided in the *2018 Massachusetts SHMCAP*, and the Hazard Assessment outlined in Section 4.A of this document.

DISASTER NAME (DATE OF EVENT)	DISASTER NUMBER (TYPE OF ASSISTANCE)	DECLARED AREAS		
Hurricane Bob	FEMA-914	Counties of Barnstable, Bristol, Dukes, Essex,		
(August 1991)	(Public)	Hampden, Middlesex, Plymouth, Nantucket, Norfolk, Suffolk		
	Hazard Mitigation Grant Program	Counties of Barnstable, Bristol, Dukes, Essex, Hampden, Middlesex, Plymouth, Nantucket,		
Severe Coastal Storm (October 1991)	FEMA-920-DR-MA (Public)	Norfolk, Suffolk (16 projects) Counties of Barnstable, Bristol, Dukes, Essex, Middlesex, Plymouth, Nantucket, Norfolk, Suffolk		
	FEMA-920-DR-MA (IMA)	Counties of Barnstable, Bristol, Dukes, Essex, Middlesex, Plymouth, Nantucket, Norfolk, Suffolk		
	FEMA-920-DR-MA (HMGP)	Counties of Barnstable, Bristol, Dukes, Essex, Middlesex, Plymouth, Nantucket, Norfolk, Suffolk (10 projects)		
Blizzard (March 1993)	FEMA-3103-EM (PA)	All 14 Massachusetts counties		
Blizzard (January 1996)	FEMA-1090-EM (PA) (Public)	All 14 Massachusetts counties		
Severe Storms and Flooding (October 1996)	FEMA-1142-DR-MA (PA)	Counties of Essex, Middlesex, Norfolk and Plymouth, Suffolk		
	FEMA-1142-DR-MA (IFG)	Counties of Essex, Middlesex, Norfolk and Plymouth, Suffolk		
	FEMA-1142-DR-MA (HMGP) and FY1997 CDBG	Counties of Essex, Middlesex, Norfolk, and Plymouth, Suffolk (36 projects)		
Heavy Rain and Flooding (June 1998)	FEMA-1224-DR-MA (IFG)	Counties of Bristol, Essex, Middlesex, Norfolk, Suffolk, Plymouth, Worcester		
	FEMA-1124-DR-MA (HMGP) and FY1998 CDBG	Counties of Bristol, Essex, Middlesex, Norfolk, Suffolk, Plymouth, Worcester		
Severe Storms and Flooding (March 2001)	FEMA-1364-DR-MA (IFG)	Counties of Bristol, Essex, Middlesex, Norfolk, Suffolk, Plymouth, Worcester		
· · ·	FEMA-1364-DR-MA (HMGP)	Counties of Bristol, Essex, Middlesex, Norfolk, Suffolk, Plymouth, Worcester (16 projects)		
Snowstorm (March 2001)	FEMA-3165-DR-MA (IFG)	Counties of Berkshire, Essex, Franklin, Hampshire, Middlesex, Norfolk, Worcester		
Terrorist Attack (September 11, 2001)	FEMA-1391(IFG)	MA residents who requested crisis counseling services following September 11 th		
Snowstorm (February 17-18, 2003)	FEMA-3175-EM (PA)	All 14 Massachusetts counties		
Snowstorm (December 3-4, 2003)	FEMA-3191-EM (PA)	Counties of Barnstable, Berkshire, Bristol, Essex, Franklin, Hampden, Hampshire,		

TABLE 4.B.2 DISASTER DECLARATIONS FOR ESSEX COUNTY (1991 – 2020)

TABLE 4.B.2 DISASTER DECLARATIONS FOR ESSEX COUNTY (1991 – 2020)

		, , , , , , , , , , , , , , , , , , ,
DISASTER NAME (DATE OF EVENT)	DISASTER NUMBER (TYPE OF ASSISTANCE)	DECLARED AREAS
		Middlesex, Norfolk, Plymouth, Suffolk, Worcester
Flooding (April 2004)	FEMA-1512-DR-MA (IFG) FEMA-1364-DR-MA (HMGP)	Counties of Essex, Middlesex, Norfolk, Suffolk, Worcester
Severe Winter Storm (January 2005)	FEMA-1301-EM (PA)	All 14 Massachusetts counties
Hurricane Katrina (August 2005)	FEMA-3252-EM (PA)	All 14 Massachusetts counties
Severe Storms and Flooding (October 2005)	FEMA-1614-DR (IHP) FEMA-1614-DR-MA (HMGP)	Counties of Berkshire, Bristol, Franklin, Hampden, Hampshire, Middlesex, Norfolk, Plymouth, and Worcester HMGP funds available to all 14 Massachusetts counties
Severe Storms and Flooding (May 12-23, 2006)	FEMA-1642-DR-MA (PA) FEMA-1642-DR-MA (IHP) FEMA-1642-DR-MA (HMGP)	Counties of Essex, Middlesex Counties of Essex, Middlesex, Suffolk All 14 Massachusetts counties
Severe Storms and Flooding (April 2007)	FEMA-1701-DR-MA (PA) FEMA-1701-DR-MA (HMGP)	All 14 Massachusetts counties
Severe Winter Storm (December 2008)	FEMA-3296-EM-MA (HMGP)	Counties of Berkshire, Essex, Franklin, Hampden, Hampshire, Middlesex, Suffolk, and Worcester
Severe Storms and Flooding (December 2008)	FEMA-1813-DR-MA ((PA) FEMA-1813-DR-MA (HMGP)	Counties of Berkshire, Essex, Franklin, Hampden, Hampshire, Middlesex, Suffolk, and Worcester. HMGP funds available to all 14 Massachusetts counties
Severe Storm and Flooding (March-April 2010)	FEMA-1895-DR-MA (PA) FEMA-1895-DR-MA (IHP)	Counties of Essex, Suffolk, Plymouth, Middlesex, Norfolk, and Worcester
Severe Storm and Snowstorm (January 2011)	FEMA-1959-DR-MA (PA) FEMA-1959-DR-MA (HMGP)	Counties of Berkshire, Essex, Hampden, Hampshire, Middlesex, Norfolk, and Suffolk. HMGP funds available to all 14 Massachusetts counties
Severe Storm and Snowstorm (October 2011)	FEMA-4051-DR-MA (HMGP)	HMGP funds available to all 14 Massachusetts counties
Severe Winter Storm, Snowstorm, and Flooding (February 2013)	FEMA-4110-DR-MA	Counties of Barnstable, Berkshire, Bristol, Dukes, Essex, Hampden, Hampshire, Middlesex, Nantucket, Norfolk, Plymouth, Suffolk, and Worcester
Severe Winter Storm and Flooding (January 26-28, 2015)	FEMA-4214-DR-MA (HMGP)	Counties of Barnstable, Bristol, Dukes, Essex, Middlesex, Nantucket, Norfolk, Plymouth, Suffolk, and Worcester
Severe Winter Storms and Flooding (March 2-3, 2018)	FEMA-4372-DR-MA (HMGP)	Counties of Barnstable, Bristol, Essex, Nantucket, Norfolk, and Plymouth HMGP Funds available to all 14 Massachusetts counties
Massachusetts COVID-19 Pandemic (January 20, 2020, and continuing) Kev:	FEMA-4496-DR-MA	All 14 Massachusetts Counties

Key:

PA-Public Assistance Project Grants: Supplemental disaster assistance to states, local governments, certain private non-profit organizations resulting from declared major disasters or emergencies.

HMGP – Hazard Mitigation Grant Program: Project grants to prevent future loss of life or property due to disaster. A presidential declaration of a major disaster or emergency is needed to designate HMGP assistance.

TABLE 4.B.2 DISASTER DECLARATIONS FOR ESSEX COUNTY (1991 – 2020)

DISASTER NAME (DATE OF EVENT)	DISASTER NUMBER (TYPE OF ASSISTANCE)	DECLARED AREAS
		provides grants and loans to individual disaster victims saster Housing, State IFG Program, and/or SBA Home

CDBG - Community Development Block Grant: Project grants for community development-type activities to assist with long-term recovery needs related to both residential and commercial buildings.

Potential Flood Damage as a Measure of Vulnerability

The most common and costly hazard in the Merrimack Valley is *flooding*. Estimates of the potential impact of flooding on Newburyport were calculated as one means of measuring the City's vulnerability to this most common natural hazard. Among all the hazards considered by this Plan, flooding is the one that is both most widespread and measurable. Also. methodologies to measure the geographic impact of flood events are well developed, and mitigation practices to reduce flood impacts are well understood.



Merrimack River Mother's Day 2006 (MVPC Photo)

The methodology utilized by MVPC estimated the total value of buildings within the 100year floodplain using assessed value data from the 2020 tax assessor records in each community. The 100-year floodplain is a well-defined geographical area for which digital (GIS) map files are readily available. The Flood Insurance Rate Map (FIRM Q3) data layers were obtained from MassGIS showing the 100-year floodplains (Zones A, A1-30, and AE). MVPC superimposed these data layers on the building location data for Newburyport. The building location data was derived from a comprehensive, region-wide point file created by MVPC from recent digital aerial photography (2019). The buildings include both primary structures and secondary outbuildings (garages, barns, etc.), and are geo-referenced and linked to the assessors' property records.

From this intersection of floodplain and building location data layers, MVPC was able to determine both the total number of buildings in Newburyport's 100-year floodplain and their corresponding assessed values. This information was organized and recorded by land use category – i.e., residential (all types), commercial, industrial, and institutional – and is presented in Table 4.B.3 (also shown in section 4.1).

The last column of the table shows the total value of buildings within the 100-year floodplain. Given the limitations in funding and methodology, no attempt was made to estimate the probable amount of damage from a 100-year storm event. Instead, the total

value of the buildings is the upper limit of potential damages. This limit would not be reached except in the case of a rare storm event exceeding the 100-year storm.

Table 4.B.3 Assessed Value of Buildings in the 100-Year Floodplain												
Number of Buildings	1	Total Assessed Value in 100-Yr										
Danango	rtoordontidi	Connoronal	induotinai	montational								
968	\$160,636,100	\$19,006,500	\$8,929,300	\$11,792,300	\$200,364,100.00							
	Number of Buildings	Number of Assess Buildings Residential	Number of Assessed Building Valu Buildings Residential Commercial	Number of Buildings Assessed Building Value by Land Use Residential Commercial Industrial	Number of Buildings Assessed Building Value by Land Use Type Buildings Residential Commercial Industrial Institutional							

Source: MVPC digital imagery and local assessor records

The total assessed value of all buildings in Newburyport is \$3,450,859,500 to provide context for the above. While the table figures provide an estimate of the building values, they do not include the estimated cost of replacing building contents. It is also important to note that loss of property does not reflect the entire cost of a region-wide flood event. There may also be added personnel (overtime) costs, rescue and evacuation costs, infrastructure repair/replacement costs, sediment and debris cleanup costs, and economic costs related to business closures.

Vulnerability to Future Natural Hazards

Based on the identification and profile of the natural hazards that have occurred throughout the region over time, a vulnerability matrix has been developed. The matrix, adapted from a prior Massachusetts Hazard Mitigation Plan developed by MEMA, was used to categorize each hazard based on frequency, severity, extent of impact, and area of occurrence. Historical data were utilized, as well as the best available scientific assessments, published literature, and input from subject area experts. The criteria were formulated based on the hazard identification profile and from the prior assessment performed for the region. There have been no significant changes in the region's vulnerability since the completion of the 2016 Regional Multi-hazard Mitigation Plan, however Coastal Erosion and Tsunamis have been included in this updated plan.

Table 4.B.4 lists the natural hazards to which the region is vulnerable, describes the expected frequency of occurrence, and the potential severity of the damage resulting from each hazard. The key at the bottom of the table describes the criteria used in the assessment.

	F		SEVE	RITY	r		AREA C IMPAC		AREA OF OCCURRENCE					
HAZARD (list reflects order addressed within plan)	VERY LOW	гом	MODERATE	HIGH	MINOR	SERIOUS	EXTENSIVE	CATASTRO- PHIC	ISOLATED	LOCAL/ MUNICIPAL	REGIONAL	ISOLATED	LOCAL/ MUNICIPAL	REGIONAL
FLOOD				Х		Х				Х	Х		Х	Х
COASTAL EROSION				Х		Х				х			Х	
DAM FAILURE		Х				Х				Х			Х	
HURRICANE			Х			Х					Х			Х
TORNADO			Х				Х			Х	Х		Х	Х
THUNDERSTORM				Х	Х						Х			Х
NOR'EASTER				Х		Х					Х			Х
SNOWSTORM/ BLIZZARD				Х		Х					Х			Х
ICE STORM			Х			Х					Х			Х
ICE JAM		Х			Х				Х	Х			Х	
DROUGHT			Х		Х						Х			Х
WILDFIRE			Х			Х				Х			Х	
EARTHQUAKE		Х				Х					Х			Х
TSUNAMI	Х						Х				Х			Х
LANDSLIDES	X				Х				Х	Х		Х	Х	
CLIMATE CHANGE				Х			Х				Х			Х
KEY: FREQUENCY: Very Low: Low: Moderate: High: SEVERITY: Minor: Serious: Extensive: Catastrophic: AREAOFIMPACT: Isolated:	Occurs less frequently than once in 100 years Occurs from once in 50 years to once in 100 years Occurs from once in 5 years to once in 50 years Occurs more frequently than once in 5 years Limited and scattered property and infrastructure damage; essential services not interrupted Scattered major public and private property and infrastructure damage, brief service interruptions, injuries, and deaths possible Widespread major public and private property and infrastructure damage with long term public service interruptions, many injuries, and fatalities probable Destruction of private and public property and infrastructure with numerous deaths and injuries													
Local/Municipal: Regional: <u>AREAOFOCCURRENCE:</u> Isolated: Local/Municipal: Regional:	Impact Impact jurisdic	will only will be i will only tions will only	realized / be rea / be rea	d within alized i alized v	i two or n a sma vithin a	more l all area local ji	ocal ju within urisdict	risdictic a local ion or p	ons on jurisdio arts of	one or m a more w ction or p one or m	idesprea arts of o lore loca	ad basi: ne or n I jurisd	s nore loca ictions	al

Hazards can be interrelated and the impacts of one hazard can create the occurrence of another. For example, an earthquake might trigger fires or landslides, and the impacts of climate change are known to increase the frequency and severity of storm events. **Table**

Table 4.B.5 Secondary Impacts from Primary Natural Hazards														
	SECONDARY IMPACTS													
PRIMARY HAZARD (list reflects order addressed within plan)	Structural damage	Utility outage	Chemical release	Commodity shortage	Emergency communications failure	Erosion	Structural fire	Disease	Flooding	Landslide	Dam failure	Tornado	Hail	Wildfire
FLOOD	Х	Х	Х			Х		Х		Х	Х			
COASTAL EROSION	Х	Х				Х			Х					
DAM FAILURE	Х	Х	Х			Х		Х	Х					
HURRICANE	Х	Х	Х	Х	Х	Х		Х	Х			Х		
TORNADO	Х	Х	Х										Х	
THUNDERSTORM		Х					Х					Х	Х	Х
NOR'EASTER	Х	Х		Х		Х	Х		Х					
SNOWSTORM/ BLIZZARD	Х	Х		Х			Х							
ICE STORM	Х	Х	Х	Х	Х		Х							
ICE JAM	Х								Х		Х			
DROUGHT				Х										Х
WILDFIRE	Х		Х				Х							
TSUNAMI	Х	Х	Х	Х	Х	Х			Х					
EARTHQUAKE	Х	Х	Х	Х	Х		Х			Х	Х			
LANDSLIDES	Х					Х								

4.B.5 graphically outlines the potential secondary effects of each natural hazard.

Source: Derived from the 2013 Massachusetts State Hazard Mitigation Plan, MEMA

C. Non-Natural Hazards

The Massachusetts Emergency Management Agency (MEMA) is the state agency responsible for coordinating federal, state, local, voluntary, and private resources during emergencies and disasters in the Commonwealth of Massachusetts. MEMA provides leadership in developing plans for an effective response to all hazards, disasters, or threats; trains emergency personnel; provides information to the public; and assists individuals, families, businesses, and communities to mitigate against, prepare for, respond to, and recover from emergencies caused by both nature and humans.

Each municipality, including Newburyport, has a Comprehensive Emergency Management Plan (CEMP) in place. The CEMP combines the four phases of emergency management: mitigation, preparedness, response, and recovery. In the interest of holistically addressing mitigation and its interrelationship with emergency management overall, this Hazard Mitigation Plan provides an overview of several hazards that are nonnatural and pose a threat to the state, the region, and the City of Newburyport. This section of the Newburyport HMP is intended to highlight recent disasters in the region that have served as the backdrop to this community planning process and complement hazards at the regional and local levels. MEMA and the City maintain Comprehensive Emergency Management Plans (CEMPs), as well as other documents that outline the specific response and mitigation associated with non-natural disasters, crime, and other emergencies.

4.8 Public Health Emergencies and Hazards

Newburyport and the world are currently battling COVID-19, a new strain of coronavirus (similar to the H1N1 virus of 2009) that was first discovered in Wuhan, China in December of 2019 and first recognized in the United States in January of 2020. This virus, unlike any other since the 1918 flu pandemic, is overwhelming public health systems. Infectious disease emergencies are extremely rare - while previously the Massachusetts Department of Public Health (MDPH) received 10,000 case reports annually, as of December 4, 2021, there have been over 689,446 cases of COVID-19 with 8,461 deaths as reported to the CDC (December 4, 2020 – December 4, 2021).⁵³ While generally, health care providers, local boards of health, and the MDPH handle most infectious diseases routinely, this outbreak has presented unprecedented challenges including a state "stay at home" order in the spring of 2020.

Worldwide travel and the re-emergence of infectious diseases in more virulent forms have increased the rate of public health infectious disease emergencies and may continue to do so into the future. The Massachusetts Department of Public Health is the primary agency responsible for the study, planning, isolation/quarantine and actions, surveillance, and reporting for all public health emergencies. Any cluster or outbreak of any unusual disease or illness must be reported to the local board of health (or to MDPH if the local board of health is not available). Vaccines are now available to battle the current coronavirus outbreak, and nearly 5 million people in the state have been fully vaccinated with many more having at least one dose. However, the country, state, and individual communities still have much work to do to bring this virus under control as new variants of the virus are detected and continue to spread.

Furthermore, in addressing the public health challenges of this virus, the country, state, and communities have had to develop measures to address both social and economic fallout of the virus including high levels of unemployment and business closures as well as challenges to conducting the day-to-day operations of all state and municipal functions. All levels of society have been affected including education and social services. While many lessons have already been learned, new procedures to deal with future public health emergencies will certainly be needed once the current crisis has passed.

Government at all levels must also be prepared for bioterrorism, or the intentional use of (or threat to use) biological agents including but not limited to anthrax, botulism, brucellosis, cholera, pandemic influenza, plague, ricin, smallpox, tularemia, and viral hemorrhagic fevers.

⁵³ CDC. 2022. COVID Data Tracker. https://covid.cdc.gov/covid-data-tracker/#datatracker-home Newburyport Multi-Hazard Mitigation Plan 2022

4.9 Infrastructure Failure

Infrastructure failure includes technological emergencies that result in an interruption or loss of a utility service, power source, life support system, information system, or equipment needed to keep the businesses in operation. Examples include:

- Utilities such as electric power, gas, water, hydraulics, compressed air, municipal;
- Sewer systems, water treatment plants, and wastewater treatment plants;
- Security and alarm systems, elevators, lighting, life support systems, heating, ventilation, and air conditioning systems, and electrical distribution systems;
- □ Manufacturing equipment and pollution control equipment;
- Communication systems, both data and voice computer networks; and
- □ Transportation systems including air, highway, railroad, and waterways.

In late afternoon September 13, 2018, the towns of North Andover, Lawrence, and

Andover, experienced a series of simultaneous natural gas explosions and fires caused by the release of high-pressure gas into a lowpressure distribution system. The event occurred as Columbia Gas-contracted construction crews were working on a major infrastructure upgrade to replace 7,506 feet of low-pressure gas mains including cast iron segments originally installed in the early 1900s.



The explosions and fires ignited by natural gas-fueled appliances damaged 131 structures in the three communities. Leonel Rondon, an 18-year-old Lawrence resident, was killed when a house chimney collapsed onto his parked car in a building explosion on Chickering Road in Lawrence. At least 21 people received treatment at area hospitals for injuries.⁵⁴ The three municipal Fire Departments responded to initial calls and required mutual aid from departments throughout eastern Massachusetts, New Hampshire, and Maine.

Residents with homes served by natural gas were told to shut off gas service and to evacuate. As a safety precaution, National Grid shut down electrical power to the affected communities. Local roads and the regional highways became gridlocked as State Police closed Interstate 495 ramps into Andover, North Andover, and Lawrence and as resident evacuations took place through the afternoon commute peak and into the evening.

On September 14, 2018, in response to the severity of the situation, Governor Baker made a State of Emergency declaration. In Andover, officials on short notice set up an overnight shelter at the Senior Center. Schools were closed, and Merrimack College temporarily evacuated its buildings. Before power could be restored and people allowed to return to their homes and businesses in the days and weeks following, teams of

⁵⁴ NTSB. 2018. NTSB Preliminary Report PLD13MR003 10/11/2018 and Safety Recommendation Report PSR-18/02.

inspectors would enter each building to conduct safety checks and ensure no concentrations of trapped gas were present.

By the weekend of Sept. 15-16, officials were transitioning from Emergency Response to the Recovery phase of operations, a massive effort that extended into December. Gas service restoration to the 8,600 impacted area Columbia Gas customers involved the replacement of 48 miles of gas lines in the three communities. With utility construction crews dispatched to the Merrimack Valley from throughout the country, the gas line replacement work was completed weeks ahead of the Nov. 19 scheduled completion date, but full-service restoration to individual properties was a time-consuming process complicated by requirements of code compliance in replacing appliances in older structures and the demand for more plumbers and contractors. Temporary housing for displaced residents in area hotels/motels and RV trailers was established. To house construction workers, Columbia Gas leased a cruise ship docked in Boston Harbor. Many businesses, including restaurants dependent on gas service, were forced to shut down for weeks and months as they awaited service restoration. Some reopened after converting their energy source to propane or electric. Restoration of heat and working appliances was finally completed for most properties by the end of December, but in some cases, work continued into 2019.

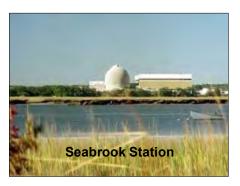
The Columbia Gas explosions emergency reinforced the importance of community engagement and planning on how to effectively respond and mobilize resources to protect and inform the public and shelter and provide for those displaced, especially the most vulnerable. Subsequent recovery efforts to bolster businesses that lost revenue during the disaster provided important lessons which, tragically were experienced again, and more severely, as a result of the COVID-19 pandemic.

Technological emergencies have the potential to occur in every municipality. Communities with limited infrastructure are more vulnerable to experiencing an incident because of the lack of redundant systems. Newburyport should continue mitigation measures already in process including installing emergency generators, burying cable, installing back-up systems, and undertaking regular system maintenance including vegetation management (tree and brush pruning) to help reduce risks.

4.10 Nuclear Event

As described in the joint Nuclear Regulatory Commission and Federal Emergency Management Agency publication "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants" (NUREG-0654 REMA-REP-1 Rev.1), a radioactive plume released from a nuclear power plant consists of gaseous and/or particulate material. Three dominant modes of exposure have been identified from atmospheric releases: external whole-body irradiation, inhalation, and ingestion. External whole-body irradiation is direct exposure from gamma radiation in or from the plume. Internal exposure occurs primarily through the inhalation of airborne radioactive material in the plume or from breathing re-suspended material deposited from a passing plume. Ingestion is exposure to radiation following the consumption of contaminated food or water by mouth.

Exposure to radiation is measured on a dose equivalent basis. Dose equivalent (or effective dose) combines the amount of radiation absorbed and the medical effects of that type of radiation. For beta and gamma radiation, the dose equivalent is the



same as the absorbed dose. By contrast, the dose equivalent is larger than the absorbed dose for alpha and neutron radiation, because these types of radiation are more damaging to the human body. Units for dose equivalent are the roentgen equivalent man (rem) and sievert (Sv), and biological dose equivalents are commonly measured in 1/1000th of a rem (known as a millirem or mrem).⁵⁵ Linear no-threshold (LNT) dose-response relationship is used to describe the relationship between radiation dose and the occurrence of cancer. This dose-response model suggests that any increase in dose, no matter how small, results in an incremental increase in risk. The U.S. Nuclear Regulatory Commission (NRC) accepts the LNT hypothesis as a conservative model for estimating radiation risk. The greater the dose received the greater the potential for biological effect. However, it is impossible to predict precisely how an individual will respond to a particular dose, as effects will vary from one person to another.

The average annual whole body dose equivalent from all natural sources of radiation in the U.S. is estimated to be approximately 360 millirems. This dose results from exposure to cosmic and terrestrial radiation sources and radiation from internally deposited radio nuclides. Additionally, the use of x-rays and radioactive materials in medicine and dentistry add to overall population doses.

Radiation effects can be classified in two categories, early or delayed, but these categories are not mutually exclusive. Early acute effects of radiation exposure generally occur within 90 days from exposure, and may include fatalities, symptoms of acute radiation syndrome, or clinically detectable changes in blood and chromosomes. However, emergency protective actions can be taken to prevent or minimize these effects. Delayed effects of radiation exposure (i.e., biological effects that can only be observed on a statistical basis) could occur in some members of a population that has been exposed to radioactive materials. The effects may include fatalities or disabilities of anatomical or genetic origin.

The Nuclear Regulatory Commission (NRC) and the Environment Protection Agency (EPA) utilize the emergency planning zone (EPZ) concept. EPZs are designated areas for which plans are prepared to ensure that prompt and effective actions can be taken to protect the public in the event of an incident at a nuclear power plant. There are three EPZs that

⁵⁵ USNRC.2020. Measuring Radiation. http://www.nrc.gov/about-nrc/radiation/health-effects/measuring-radiation.html

impact Massachusetts. The Pilgrim Nuclear Power Station located in Plymouth and formerly operated by Entergy Nuclear Northeast was the only nuclear power generation facility located within the borders of Massachusetts. It ceased power generation in May of 2019. Two other licensed facilities are located just over the border from Massachusetts. These include the Vermont Yankee Nuclear Power Station (Vermont Yankee) located in Vernon, Vermont (shut down in December of 2014); and Seabrook Nuclear Power Station, located in Seabrook, New Hampshire, and operated by NextEra Energy.

The Seabrook Nuclear Power Station is located on 900 acres north of the Merrimack Valley region in the seacoast region of southern New Hampshire. The plant is sited in one of the lowest hazard zones for earthquakes, according to the U.S. Geological Survey, and is designed to withstand an earthquake significantly higher than any recorded in New England history. The plant lies two miles inland and is elevated 20 feet above sea level to protect against coastal flooding and extreme storm surges. With its 1244 megawatts of electrical output, Seabrook station is the largest individual electrical generating unit on the England power grid. The area approximately 10 miles around Seabrook Station is called the emergency planning zone and includes Amesbury, Merrimac, Newburyport, Salisbury, and West Newbury. Emergency Management officials in Newburyport coordinate regularly and are trained for the unlikely event of emergencies involving the Seabrook Station.

4.11 Chemical/Hazardous Materials Spills and Releases

Chemical agents are poisonous vapors, aerosols, liquids, and solids that have a toxic effect on people, animals, or plants. Such agents can be released by accident, by bombs, or sprayed from aircraft, boats, and vehicles. They can have an immediate effect (a few seconds to a few minutes) or a delayed effect (2 to 48 hours). While potentially lethal, chemical agents are generally difficult to deliver in lethal concentrations. Outdoors, the agents tend to dissipate rapidly. Chemical agents also are difficult to produce. A chemical attack could come without warning. Symptoms of a chemical release include difficulty breathing, eye irritation, loss of coordination, nausea, or a burning sensation in the nose, throat, and lungs. The presence of many dead insects or birds may also indicate a chemical agent release.

Chemicals are found throughout our communities. They are used to purify drinking water, increase crop production, and simplify household chores. But chemicals can be hazardous to humans or the environment if used or released improperly. Hazards can occur during production, storage, transportation, use, or disposal processes. Hazardous materials come in the form of explosives, flammable and combustible substances, poisons, and radioactive materials. These substances are most often released as a result of transportation accidents or because of chemical accidents at industrial plants. A hazardous material spill or

release can pose a risk to life, health or property. An incident can result in the evacuation of a few people, a section of a facility or an entire neighborhood.

There are several Federal laws that regulate hazardous materials, including: the Superfund Amendments and Reauthorization Act of 1986 (SARA), the Resource Conservation and Recovery Act of 1976 (RCRA), the Hazardous Materials Transportation Act (HMTA), the Occupational Safety and Health Act (OSHA), the Toxic Substances Control Act (TSCA) and the Clean Air Act. Title III of SARA regulates the packaging, labeling, handling, storage, and transportation of hazardous materials. The law requires facilities to furnish information about the quantities and health effects of materials used at the facility, and to promptly notify local and State officials whenever a significant release of hazardous materials occurs.

Communities with a large industrial base may be more likely to experience a hazardous materials release due to the number of facilities that use such materials in their manufacturing processes. Communities with major highways or rail corridors may also be at a greater risk due to the number of trucks or trains transporting hazardous materials.

The locations of facilities that store hazardous chemicals and other materials are known to all emergency operation personnel and community leadership. These facilities have disaster response plans and shut-down measures in place. These plans have been shared with Newburyport Emergency Management.

SECTION 5. EXISTING PROTECTIONS MATRIX



This section of the Plan presents an Existing Protections Matrix for Newburyport. The matrix is an inventory of zoning, land use, and environmental regulations already in place as well as ongoing or completed maintenance projects, and other programs and activities that are related to natural hazard mitigation. Compiling such an inventory allows gaps and deficiencies to be identified.

As part of the plan updating process, the 2016 information was reviewed and revised through a series of email communications and conversations with Core Team members and other Newburyport municipal staff. Also, local zoning bylaws, subdivision rules and regulations, EPA MS4 stormwater management materials, Newburyport Master Plan, Open Space and Recreation Plan, and the City website were consulted.

The updated existing protections inventory reflects current conditions and incorporates new measures that have been put in place over the last five years, as shown in the following matrix.



Regular Street Sweeping

Tree-pruning to Protect Utility Lines

Table 5.1 City o	f Newburyport Exis	ting Protection	ns Matrix: Plans and	Policies
Type of Existing Protection	Description	Area Covered	Effectiveness/ Improvements Needed	Hazard
City participation in the National Flood Insurance Program (NFIP)	Regulates development activity and provides flood insurance for structures located in flood-prone areas	FEMA flood zones	Effective	Flooding
Local Citywide Wetlands Protection Ordinance and Regulations	Regulates activity throughout the city to conserve fragile natural resources	Inland and coastal wetland resource areas and buffer zones	Effective – Regulations updated in 2019 to include Land subject to coastal storm flowage and sea level rise	Flooding
Stormwater Management Ordinance and Regulations	Management development activity Drdinance and encompassing one		Effective - ordinance updated 2010; Rules & Regs Adopted April 2014	Flooding
Subdivision Rules & Regulations	Determines way land parcels may be divided, and the specific stormwater/flooding mitigation that is required	City-wide	Update needed	Flooding
Zoning Ordinance	Regulates uses /development in various geographic zones within the city promoting the health, safety, and welfare of city residents	City-wide	Current version August 23, 2021 – improvements to regulate in future flood- prone areas and water supply demand needed	All Hazards
Master Plan	Provides guidance for community growth and preservation of open space and natural resources	City-wide	Effective - Updated 2017- incorporates sustainability and energy including resiliency goals	All Hazards
Local Open Space & Recreation Plan	Proactive plan to preserve and protect City's open space and natural resources,	City-wide	Effective – Updated 2020 incorporates actions to mitigate effects of climate change including sea- level rise	Flooding, Drought

Open Space Residential Overlay District	Promotes cluster style residential development where appropriate to limit impervious surfaces and preserve open space and natural resources	Overlay District Area	Moderately effective – In need of update	Flooding , drought
Climate Resiliency Plan	A plan created to increase community resilience related to impacts of climate change including sea level rise, storm surge, flooding and extreme weather events throughout the City.	City-wide	Effective	Capital infrastructure, administration and regulation, communication and education, and carbon footprint reductions.
State Building Code	City enforces the Mass State building code	City-Wide	Effective	Multi-hazard
Strategic Land Us Plan	A strategy for conservation and development aimed at an area in the southern portion of Newburyport identified in the 2001 Master Plan.	Encompasses the City's industrial park, several residential neighborhoods, and an open space corridor extending into the Town of Newbury.	Moderately Effective- developed in 2004	Multi-Hazard
Comprehensive Emergency Management Plan	Details procedures to be followed in the event of an emergency of any type	City-wide	Effective - Maintain CEMP and upgrade as needed to ensure its applicability	Multi-hazard
Waterfront Strategic Plan	A plan developed from a public process that brought together a broad spectrum of stakeholders to serve as a blueprint for reestablishing a strong link between the city and its harbor.	Coastal	2003- Could be updated specifically to include climate change.	Flooding

Great Marsh Coastal Adaptation Plan	A holistic and integrated plan to reduce the growing vulnerability of communities within the Great Marsh to coastal hazards.	City-Wide	Effective – One time study produced in association with Hurricane Sandy Resiliency Grant	Multi-Hazard
Housing Production Plan	Proactive strategy for planning and developing affordable housing	City-wide	Effective- last updated 2018. Update planned for 2023.	Multi-Hazard

Together, these planning documents provide tangible goals for hazard mitigation, as well as guidance on how to manage and mitigate impacts resulting from natural hazards for the city of Newburyport. However, constant modifications and revisions are needed to ensure these planning documents remain accurate and relevant. Based on current condition, the following updates should be made:

- Update Subdivision Rules and Regulations Review, evaluate and revise Zoning and Building Regulations to improve resilience, water conservation, energy efficiency and discourage development in high hazard flood zones.
- Update Open Space Residential Overlay District.
- Develop and adopt a design flood elevation for all new and proposed renovations of properties in high hazard flood zones.
- Implement a storm water/impervious surfaces management program in compliance with EPA MS4 permit.

Table 5.2 C	ity of Newburyport Ex	kisting Prote	ctions Matrix: Progr	rams
Type of Existing Protection	Description	Area Covered	Effectiveness/ Improvements Needed	Hazard
Estuary Management Plan—8 Towns & the Great Marsh	Promotes prudent use and conservation of natural resources in Newburyport portion of Great Marsh/Parker River ACEC	Environmental Concern (ACEC)	Moderately effective - More personnel and funding resources needed to carry out and monitor action Recommendations.	Flooding
GIS Infrastructure Inventory and arial drone imagery	Data-driven asset management system inc. MIMAP parcel/ infrastructure info	City-wide	Effective – continue adding data layers and updates	Multi-hazard
CodeRed Community Notification System & E-alerts	Code Red in place and active social media use for communications as well as Seabrook Plant sirens at EMS Communications Center	City-wide	Effective	Multi-hazard
Regional Shelter	Collaboration with Salisbury, Newbury, and Salvation Army in regional shelter services in emergency responses	City-wide	Effective – update MOU	Multi-hazard
Portable Generators	Newburyport EMS has 3 portable generators available. Additional available through DPS	Emergency Management	Effective	Flooding/ Drought
Municipal Maintenance	street sweeping, catch basin cleaning, roadway treatment, tree trimming, and snow disposal	City-Wide	Effective	Multi-Hazard
Public Education	Educating homeowners, businesses, schools, and residents on climate resiliency and adaptation issues especially related to flooding and other coastal hazards.	City-Wide	Effective, but could be expanded	Multi-Hazard

While Newburyport provides extensive public outreach and education, a few key areas could be further expanded by developing a public outreach and education program to educate residents and municipal boards/committees about this resiliency plan. Specifically: promote personal preparedness, community resiliency, natural hazard mitigation, public health impacts, and managing carbon footprints. Further, school-based programs could be created to educate future generations about climate change impacts and resiliency.

SECTION 6. 2016 MITIGATION MEASURES UPDATE

6.1 Implementation Progress from 2016 Plan

Newburyport's 2016 Mitigation Actions were part of the Merrimack Valley Regional Multi-Hazard Mitigation Plan. These actions were reviewed by various members of the planning team with responsibility for implementation and their status was updated to "complete," "in progress" or "not completed." Resiliency Committee members then reviewed the "in progress" and "not completed" actions to determine which should be carried forward into this Hazard Mitigation Plan Update.

The City of Newburyport has been proactive in its implementation of the prior mitigation actions. Completed actions include:

- Completion of Newburyport Climate Resiliency Plan
- Extensive Public Education and Awareness campaign following completion of Climate Resiliency plan including work by Storm Surge and Merrimack River Beach Alliance (MRBA) – presentations and speaker series
- Studied and implemented measures to protect Wastewater Treatment Plant including shoreline protection system and design for sidewall flood protection
- Department of Public Services fully accommodated in new administration building



In addition, the City of Newburyport has taken steps to implement findings from the 2016 Merrimack Valley Region Multi-Hazard Mitigation Plan Update via the following policy, programmatic areas, and plans:

- The City of Newburyport utilized the 2016 Hazard Mitigation Plan when it developed its 2020 Climate Resiliency Plan.
- In addition, Newburyport incorporated elements from the 2016 Hazard Mitigation Plan when it underwent its risk assessment process through the Commonwealth's MVP Program.
- Finally, the city has taken steps to implement findings from its 2016 Hazard Mitigation Plan into a Transportation Improvement Project (TIP) for the reconstruction of Route 1 and the Complete Streets Program

	Tab	le 6.1.1 City	of Newburyport 20)16 Mitigatio	n Action Plan								
	Projects in Development												
Category of Action	Description of Action	Hazards Addressed	Implementation Responsibility	Timeframe/ Priority in 2016	2022 Status (completed, in progress, not completed)	Include in 2022 Update?	Project Status						
Emergency Response	Review & update mutual aid agreements with adjacent towns (Essex County) and state (MA and Southern NH) for accuracy and sufficiency	All Hazards	Fire, Police, DPS	Short Term/High	In Progress	No	In Process of department legal review						
Planning/Prevention	Update Stormwater Management Program for compliance with pending EPA MS4 permit and identify sustainable funding source for implementation	Flooding	DPS/Engineering	Short- Term/High	Completed - will comply with future updates as necessary	Yes – continued enforcement of ordinance	Action pending issuance of EPA final MS4 permit in 2016 Next steps include Illicit Discharge Detection, catchment area prioritization, and Facilities O & M plans preparation.						
Public Education & Awareness	Organize Education programs and outreach on Natural Hazard preparedness and mitigation	All Hazards	Emergency Mgmt	Short- Term/High	Completed - (Coastal Resiliency Plan 2017, Storm Surge Presentations (2020), Plum Island MVP Grant public process, ongoing MRBA – reference websites Resiliency and Storm Surge, MRBA – PlumIslandSeaLevelRise.com	No	Next steps include Sandy Coastal Resiliency planning forums; EPA, Flood Resilience workshops held Fall 2015; nonprofit sponsored community presentations with Storm Surge, MRBA						
Prevention	Update zoning and building codes; consider enacting stricter standards for new development in terms of storm drainage, wind bracing, and floodplain development	All Hazards	Planning/Zoning Boards	Medium- Term/Moderate	In progress - Site Plan Review update under consideration – other zoning updates in process Waterfront Overlay District	Yes	Zoning review process underway inc. consideration of waterfront overlay district;						
Planning/Prevention	Prepare Municipal Resiliency Plan for Sea Level Rise/Storm Surge Climate Change (plan for 2 to 5 feet sea level rise by 2100) Next steps include hiring resiliency coordinator, adding municipal or regional circuit rider staff capacity to lead effort	Flooding	Conservation/Engineering	Short- Term/High	Completed – October 2020	No	Two initiatives: Sandy Resiliency Project planning to be complete 2017; EPA workshops/charette Fall 2015;						

Newburyport Multi-Hazard Mitigation Plan 2022

Table 6.1.1. City of Newburyport 2016 Mitigation Action Plan

Projects in Development

Category of Action	Description of Action	Hazards Addressed	Implementation Responsibility	Timeframe/ Priority in 2016	2022 Status (completed, in progress, not completed)	Include in 2022 Update?	Project Status
Planning/Natural Resource Protection	Maintain natural resource buffer zones and increase capacity for enforcement of environmental regulations	Flooding/ Storms	Planning/Conservation DPS	Short- Term/High	Completed – wetlands protection ordinance in place	Yes – continued enforcement of ordinance	Local Wetlands Protection Ordinance in place and effective. Gap to be addressed is need for additional inspection staffing for enforcement.
Structural	Replace culvert Parker/Scotland at city line with additional capacity as recommended in the Malcolm Hoyt Road Drainage Improvement Flood Study Dec. 2011	Flooding	DPS/Engineering	Medium Term/High	Completed – road has been raised	No	Highest priority storm drain mitigation project
Structural	Improve drainage capacity at Business & Technology Park watershed area: Improvements to include short –term swale restoration and culvert upgrades. Areas targeted are Graf Road/Quail Run Hollow/Malcolm Hoyt Dr.; Hale St by pump station.	Flooding/ Storms	DPS	Long- Term/High	In Progress - short-term items complete – City owned portion restored, Maintenance Agreements being updated, maintenance is ongoing	Yes	2 nd Highest priority storm drain capacity project
Structural	Investigate feasibility of elevating Plum Island Turnpike key access roadway vulnerable to flooding/sea level rise	Flooding/ Storms	DPS	Long- Term/Medium	Completed - cooperated with Town of Newbury on Plum Island accessibility	No	Funding for engineering study needs to be identified.
Structural	Improve drainage capacity with storage/culvert improvements at Cashman Park area.	Flooding/ Storms	DPS	Long- Term/Medium	Not completed – project not completed due to changes in funding priority. However, this task will be carried over into the updated action plan addressing Cashman Park	Yes	Included in 2011 Stormwater Management Plan DPS

	Table 6.1.1. City of Newburyport 2016 Mitigation Action Plan											
Projects in Development												
Category of Action	Description of Action	Hazards Addressed	Implementation Responsibility	Timeframe/ Priority in 2016	2022 Status (completed, in progress, not completed)	Include in 2022 Update?	Project Status					
Structural	Evaluate and correct drainage capacity structural problem @ Market Square.	Flooding	DPS/Engineering	Short- Term/High	In progress	Yes	Immediate term solution is construction of swale to be constructed by DPS in-house staff					
Structural	Roadway improvements including drainage capacity upgrade at Merrimac St in area of Mersen USA & pump station.	Flooding	DPS/Engineering	Long- Term/Low	In progress	Yes	Localized flooding problem at this location which is key access gateway route to downtown. Project included in drainage master plan.					
Structural	Feasibility study of options to protect Wastewater Treatment Plan, now vulnerable to sea level rise. Options to include elevation, relocation, or barrier protection.	Flooding	DPS/Engineering	Medium Term/High	Completed – shoreline protection system installed in spring 2021. Sidewall flood protection system under design in 2021	No	Issue raised in climate change resilience planning forums					
Structural	Floodproof sewage pump stations	Flooding	DPS	Long- Term/High	In progress – this effort is currently being investigated for feasibility	Yes	9 potentially vulnerable pump stations with sea level rise					
Prevention	Thin overcrowded forests	Brushfires	Fire/DPS	Long- Term/Medium	Not completed – project not completed due to limited funding, capacity and changes in priorities	No	Focus on vulnerable wooded areas March's Hill, Maudslay.					
Emergency Services Protection	Renovate DPS facility to accommodate City employees during severe weather events & disasters. Facility has had long-term use of "temporary" office trailers.	All Hazards	DPS	Medium Term/Medium	Completed – Department of Public Works fully housed in new administration building (2016)	No	Next step is to develop revised bid package or seek additional funding after project bids came in over budget 2015.					

Newburyport Multi-Hazard Mitigation Plan 2022

	Table 6.1.1. City of Newburyport 2016 Mitigation Action Plan											
Projects in Development												
Category of Action	Description of Action	Hazards Addressed	Implementation Responsibility	Timeframe/ Priority in 2016	2022 Status (completed, in progress, not completed)	Include in 2022 Update?	Project Status					
Emergency Response	Purchase firefighting equipment— Two fire trucks in procurement 2015	All Hazards	Fire	Short Term/High	Completed	No	Action is emergency services response need.					
Structural	Provide redundant water and sewer systems. Target focus of Plum Island which is vulnerable to breach.	All Hazards	DPS	Long- Term/Medium	In progress - replaced fire hydrants and water piping valves (stainless steel – corrosion eliminated). New actions identified – high groundwater and SLR study	Yes	Next step of feasibility study/design					
Structural/Emergency Services Protection	Extend T1 hardware communications between municipal communication systems to DPS facility and PITA Hall	All Hazards	DPS (Emergency Mgt/Newburyport & Newbury)	Short- Term/High	Completed for Department of Public Works and City Hall	No	ID budget funding					
Public education and awareness	Organize education programs and outreach on natural hazard preparedness and mitigation	All Hazards	Director DPS/recycling, energy & sustainability/planning director/conservation administrator	Short-term/High	Completed	Yes	new related education and outreach goals to be addressed in new plan					

Success/LessonLearnedStories:

Newburyport has had many successes since the adoption of the 2016 Hazard Mitigation Plan. Primary among this is the \$32 million capital investment made to the City's Wastewater Treatment Facility to address the aging infrastructure at the plan. The City was also able to begin to address the facility's flood vulnerability by raising it slightly higher than the current 100-year flood elevation.

The City also completed the construction of a rail trail bike path alongside the WWTP that was built 1.5' above the current FEMA 100-year flood elevation to address future sea-level rise (SLR) for purposes of protecting the WWTP. However, that project is along the riverfront, which is parallel to the water. The City needs to complete the plant's flood protection perimeter berm by constructing flood walls/berms on the western and eastern sides so that they connect to the bike path berm to the north and the higher elevation of Water Street to the south. These sidewalls will complete the flood protection of the WWTP for about 1.5 feet of sea level rise. The City is currently in the design phase of the sidewalls and hope to construct as soon as funding is available, but no sooner than 2022 when the design is anticipated to be complete.

Newburyport considered building the bike path higher to protect against higher SLR amounts, but it was of no value. There are too many areas downtown where the land elevation is slightly below the bike path elevation so the ocean will simply enter those areas, enter the sewer manholes and underground sewer mains, reducing the WWTP's capacity to treat. Not until those downtown areas are raised will a higher WWTP flood protection perimeter berm be beneficial.

SECTION 7. MITIGATION STRATEGY

This section of the Plan provides the overall strategy for Newburyport to follow in becoming less vulnerable to natural hazards. It serves as the framework for the specific mitigation actions which follow in Section 8 of the plan. It is based on MVPC's discussions with, and

the consensus of, the Core Team and Stakeholders, along with the findings and conclusions of the hazard identification and analysis, MVP Workshops, HMP Planning Workshop, and the existing protection measures matrix. The purpose of the mitigation strategy is to provide Newburyport with the goals that will serve as the guiding principles for future hazard mitigation policy development, planning, and project design and implementation for the City.

44 CFR Requirement

44CFR Part 201.6c(3)(i):

The mitigation strategy shall include a description of mitigation goals to reduce or avoid long-term vulnerabilities to the identified hazards.

7.1 Mitigation Goals

The plan's mitigation goals represent broad statements thatare achieved through the implementation of more specific, action-oriented initiatives by Newburyport, acting independently and in concert with surrounding communities. In updating the Hazard Mitigation Plan, the goals of the earlier 2016 plan were reviewed and affirmed. Also, a new goal was added to address the impacts of climate change.

The overarching goal of the current plan is as follows:

Goal #1 Reduce the loss of or damage to life, property, infrastructure, and natural, cultural, and economic resources from natural disasters.

Complementing Goal #1 are the following additional goals:

- Goal #2 Improve the breadth and quality of the best available data for conducting hazard risk assessments and developing appropriate mitigation actions.
- Goal #3 Increase Newburyport's financial capability to implement hazard mitigation measures through maximizing available outside grant funding opportunities as well as locally available fiscal resources.
- Goal #4 Integrate hazard mitigation planning into existing local policies, plans, regulations, and practices to reduce or eliminate the impacts of known natural hazards.
- Goal #5 Ensure that future development will meet all federal, state, and local standards to reduce and prevent the impacts of natural hazards on public and private property throughout Newburyport.

- Goal #6 Increase the general public's awareness of natural hazard risks in Newburyport and the region, while also educating residents and businesses on the mitigation measures available to minimize those risks.
- Goal #7 Develop and implement adaptation strategies and integrate climate resiliency and mitigation into community plans and policies to protect the public, critical infrastructure, property, and natural resources from the impacts of climate change.

7.2 Mitigation Measures

The second step in formulating Newburyport's mitigation strategy involved identifying the range of mitigation activities that can help to achieve the mitigation goals cited above. The mitigation actions that follow in Section 8 are organized into the following six categories, as recommended in the FEMA *Local Multi-Hazard Mitigation Planning Handbook* (2013).

1. Prevention

Preventive activities are intended to keep hazard problems from getting worse and are typically administered through government programs or regulatory actions that influence the way land is developed and structures are built. They are particularly effective in reducing a region's or community's future vulnerability, especially in areas where development has not occurred, or capital improvements have not been substantial. Examples of preventive activities include:

- Planning and zoning
- Building codes
- Open space preservation
- □ Floodplain regulation
- Stormwater management
- Drainage system maintenance
- □ Capital improvements programming
- □ Shoreline / riverine / wetland setbacks

2. **Property Protection**

Property protection measures involve the modification of existing buildings and structures to help them better withstand the forces of a hazard, or the removal of the structures from hazardous locations. Examples include:

- □ Acquisition
- Relocation
- Building elevation
- Critical facilities protection

- □ Retrofitting (e.g., windproofing, floodproofing, seismic design techniques)
- □ Shutters, safe rooms, shatter-resistant glass
- Insurance

3. Natural Resource Protection

Natural resource protection activities reduce the impact of natural hazards by preserving or restoring natural areas and their protective functions. Such areas include floodplains, wetlands, steep slopes, and sand dunes. Parks, recreation, and conservation agencies and organizations often implement these protective measures. Examples include:

- □ Floodplain protection
- □ Wetland preservation and restoration
- Beach and dune preservation/restoration
- □ Forest and vegetation management (e.g., brush removal, fuel breaks, fire-resistant landscaping)
- □ Slope stabilization and erosion and sediment control
- □ Watershed protection measures and best management practices

4. Structural Projects

Structural mitigation projects are intended to lessen the impact of a hazard by modifying the natural progression of the hazard event via construction. Examples include:

- Dams / levees / dikes / floodwalls / seawalls
- Diversions / detention and retention basins
- Channel modification
- Beach nourishment
- □ Storm sewers

5. Emergency Services Protection

Emergency services protection measures are aimed at protecting emergency services before, during, and immediately after a hazard occurrence. Examples include:

- □ Emergency warning systems
- Emergency response training and exercises
- Evacuation planning and management
- □ Protection of critical facilities and public facilities
- □ Health and safety maintenance

6. Public Education and Awareness

Public education and awareness activities are used to advise residents, elected officials, business owners, potential property buyers, and visitors about natural

hazards, hazard areas, and mitigation techniques they can use to protect themselves and their property. Examples of measures to educate and inform the public include:

- Community outreach projects
- □ School education programs
- □ Speaker series/demonstration events
- Hazard area maps
- □ Real estate disclosure of hazards
- Library exhibits and materials
- □ Regional and community websites, with links to MEMA and FEMA websites.

7.3 Mitigation Measures for Regional and Inter-Community Issues

Newburyport included neighboring communities as well as state and regional agencies in its stakeholder workshops to help identify hazard mitigation issues that can best be addressed through regional or inter-community efforts. Shoreline erosion, flooding, water supply, and land protection are three areas where Newburyport could rely on regional entities or partners to assist in the mitigation of natural hazards and resiliency to climate change. Understanding the capabilities of regional partners and their priorities is important to improving the outcomes of various hazard mitigation efforts proposed in Section 8. Regional partners include those who own land or infrastructure within Newburyport, neighboring communities who provide support in emergencies and/or maintain interconnected infrastructure, and partners who assist in mitigation efforts such as watershed associations. These partners include:

- The Towns of Salisbury and Newbury planning participants recognized that coastal flooding and beach and dune erosion caused by storm surge and sea level rise affect all communities at the mouth of the Merrimack River. Through government leadership and the Merrimack River Beach Alliance (MRBA), the three communities are working to address natural hazards that affect coastal infrastructure and resources.
- The Town of West Newbury much of Newburyport's drinking water supply comes from the upper and lower Artichoke Reservoirs which are in both Newburyport and West Newbury. Most of the land abutting the reservoirs is in West Newbury and much of it is privately owned. Protecting the watershed will require community collaboration.
- Essex County Greenbelt Association Assist with open space acquisition and protection at a regional level. ECGA also has a priority parcel analysis that can assist communities with protecting land that promotes resiliency.
- Other communities with connected infrastructure and/or mutual aid agreements – Newburyport, together with the municipalities of Amesbury, Boxford, Georgetown, Ipswich, Merrimac, Newbury, Rowley, Salisbury, and West Newbury comprise the Northern Essex Regional Emergency Planning Committee (REPC). Emergency Planning Committees are responsible for protecting their communities from incidents involving hazardous materials. This includes developing emergency response plans and educating the community

about chemical facilities and the actions that could be taken if there is a chemical accident.

Merrimack River Watershed Council (MRWC) – Newburyport participates in Merrimack River related meetings and is working with MVPC and MRWC to operate a Bacteria Early Alert System to inform recreational users of the Merrimack River when CSO related events may affect water quality.

7.4 Mitigation Measures and New Development and Infrastructure

As discussed in Chapter 3, the age composition of Newburyport's population is anticipated to change with a 118 percent increase in the number of older adults (age 65 year and over). Hazard Mitigation Planning must consider this growth and change in population characteristics in light of any additional hazards that may occur. New development can increase existing vulnerabilities to infrastructure including water, sewer, and stormwater. New development and redevelopment must adhere to the Massachusetts State Building Code but must also consider local zoning, wetlands, sea level rise, and stormwater bylaws and regulations. To reduce flooding, increase groundwater recharge, and promote cooling, Newburyport must prioritize Low Impact Development and green infrastructure as the community expands.

To determine appropriate mitigation measures for the Newburyport, MVPC and the Core Team reviewed the MVP workshop findings, the Climate Resiliency Plan, the outcomes of the HMP planning workshop, as well as the mitigation protections currently in place. Gaps in the existing protections were particularly instructive in identifying areas for potential mitigation enhancement. Section 8 of the Hazard Mitigation Plan details the specific mitigation actions, both local and regional, for the City of Newburyport.

SECTION 8. MITIGATION ACTION PLAN

This section of the Hazard Mitigation Plan presents Newburyport-specific as well as regional mitigation actions that, if effectively implemented, will serve to minimize risks and reduce losses from natural hazards in the Merrimack Valley region. This section

contains the Local Mitigation Action Plan to be carried out by the City of Newburyport. **Regional Mitigation Actions,** to be carried out collaboratively with neighboring municipalities, and partnering agencies and organizations on an inter-municipal level, have also been incorporated.

Coordination. The proposed actions will be coordinated with other regional and community priorities, as well as with mitigation goals of state and federal agencies. Such coordination will improve access to technical assistance; provide broader support for implementation; and reduce 44 CFR Requirement

44 CFR Part 201.6c (3)(iii): The mitigation strategy shall include an action plan describing how the actions ... will be prioritized, implemented, and administered by the local jurisdiction.

duplication of effort. These actions have been further categorized into immediate, short-term projects and ongoing or longer-term measures.

Consistency with Goals & Objectives. In developing the mitigation action plans, MVPC and the Newburyport Resiliency Committee were directed by the major goals articulated in the preceding section of the Plan (Section 7), as well as the following mitigation *objectives*:

- Increase coordination between the Federal, State, regional, and local levels of government;
- Discourage future development in hazard-prone areas, such as floodplains;
- Protect and preserve irreplaceable cultural and historic resources located in hazard-prone areas;
- □ Ensure that critical infrastructure is protected from natural hazards;
- Develop programs and measures that protect residences and other structures from natural hazards;
- □ Protect electric power delivery infrastructure from natural hazards;
- Protect drinking water supplies from contamination or disruption from a natural hazard;
- Increase awareness and support for natural hazard mitigation among municipalities, private organizations, businesses, and area residents through outreach and education;
- Implement a broad range of mitigation measures that protect the region's vulnerable populations and infrastructure;

- Protect critical public facilities and services from damage due to natural hazards;
- Develop a mitigation strategy that considers the needs of area businesses and protects the economic vitality of the region;
- Update and maintain the Plan as resources permit;
- Provide information concerning hazard mitigation funding opportunities, and assist the city in the identification and development of specific mitigation projects; and
- Increase Newburyport's capacity for responding to a natural hazard event by promoting the adequate provision of emergency services.

Prioritization of Mitigation Actions. As part of the planning deliberations, MVPC and consulted with Resiliency Committee members to prioritize the proposed mitigation actions and projects. The priorities were developed through a consensus-building process that consisted of meetings and conversations with board and commission members, municipal staff, and town leadership. The following factors were considered in establishing the timeframe/priority for each action:

- □ The cost of the measure vs. the mitigation benefits;
- □ The availability of funding;
- □ The lead time required for design and implementation;
- Political feasibility and acceptability;
- □ The need for institutional and interagency agreements;
- Consistency with local and regional plans and priorities; and
- □ Whether the measure has been through a public process, needs City Council approval, or action by a permitting authority.

The cost of each mitigation action was not available for most listed action items. Projects categorized as "immediate" or "short term" are those which can go forward with little or no cost, or for which a funding source has been identified, and these projects are of high priority. Projects identified as "long-term" are either more costly or funding is not readily available, or the project may not be ready for implementation due to permitting issues or the need for design, or the project requires a long lead time, or new governmental processes will need to be established.

Those projects described as "annual" represent recurring actions that local, state, and regional bodies need to attend to regularly and factor into everyday decision-making. Examples include code enforcement (state building code, local zoning code, local wetlands regulation, etc.) and activities such as Planning Board promotion/approval of open space residential design projects that preserve 50% of a subdivision area as permanent green space. These projects are of the highest priority in that they mitigate natural hazards at a minimal cost and can be readily implemented.

It is envisioned that "immediate" projects will be implemented within 1 year, "shortterm" projects within 2-3 years, and "long-term" projects in 4 or more years. Further, "ongoing" refers to an effort without a hard start or end date, such as the continued implementation of an ordinance or plan. The timeframe assigned to each project is indicative of local and regional project priorities.

This Mitigation Action Plan is an update of the 2016 Action Plan and incorporates the outcomes of Newburyport's Resiliency Plan. It is organized in a series of matrices. The matrices note whether each particular action was included in the 2016 Plan or if it is a new action resulting from this or other planning processes. The implementation status of prior projects is noted in Chapter 6. Several of the actions contained in the 2016 Plan remain in the updated plan and continue to be a priority for Newburyport. The actions put forth in this current Hazard Mitigation Plan will be implemented as resources are made available.

Of these actions identified 10 were carried over from the previous plan. These actions include updating zoning and building codes to enact stricter standards for new developments in terms of storm drainage, wind bracing, and floodplain development, improving the drainage capacity at the Business Park, improving drainage capacity at Cashman Park, evaluating and correcting drainage capacity at Market Square, roadway improvements including drainage capacity updates at Merrimack Street, flood proofing sewage pump stations, enforcing the wetlands protection and stormwater ordinances and providing redundant water and sewer systems with a focus on Plum Island. These actions are either in progress and required continued efforts beyond the five-year timeline identified in the previous plan, or have been identified as infeasible due to capacity, funding, or public interest hinderances, and replaced with a new task which aim to accomplish the same goal. Alternatively, some tasks require ongoing support, such as the enforcement of the wetlands protection ordinance, and have thus been carried over to the new plan's action items.

Benefits. Mitigation benefits for each action are evaluated using the following criteria:

- High action will result in a significant risk reduction for people and/or property from a hazard event
- Medium action will result in a moderate risk reduction for people and/or property from a hazard event
- □ Low action will result in low-risk reduction for people and/or property from a hazard event

Cost. Costs are estimated using the following criteria:

- □ High costs greater than \$100,000
- □ Medium Costs between \$10,000 to \$100,000
- □ Low Costs under \$10,000 and/or staff time

Funding Sources. Funding sources listed are potential options that are not guaranteed.

Projects may not necessarily qualify for all sources listed and/or may not be awarded funding. Once an action is advanced, the party responsible for implementation should further explore funding opportunities, including those identified.

The Newburyport Mitigation Action Plan is presented in Tables 8.1.1

		Tab	ole 8.1.1 Newburypo	rt Mitigation Act	ion			
Category of Action	Description of Action	Hazard Addressed	Implementation Responsibility	Timeframe/ Priority	Cost	Benefit	Resources/ Funding	In Prior Plan?
Structural Project	Raise the Lower Artichoke Reservoir dam and spillway to protect it against the FEMA 100- year flood event and a breach by the Merrimack River. Incorporate some resiliency against future SLR	Flooding/Sea Level Rise/Storms	Director of DPS	Immediate/High	High	High	MVP competitive grant, American rescue plan (ARPA) funds	New
Structural Project	Design, permit and construct an emergency flood protection system at the Lower Artichoke Reservoir Dam to protect the water supply from a breach until the permanent dam and spillway has been raised	Flooding/Sea Level Rise/Storms	Director DPS/City Engineer	Immediate/High	Medium	High	Water/Sewer Enterprise Funds	New
Structural Project	Continue to implement temporary/deployable and permanent structural measures and strategic plans to protect vulnerable Critical Assets of the Wastewater Treatment facility	Flooding/Sea Level Rise/Storms	Director of DPS	Ongoing/Medium	Low	High	Water/Sewer Budget	New
Structural Project	Design, permit and build flood prevention berms around the WWTP to protect it against the FEMA 100-yr flood event. Incorporate some resiliency against future SL	Flooding/Sea Level Rise/Storms	Director DPS/City Engineer	Immediate/High	High	High	Municipal Vulnerability Preparedness (MVP) competitive grant program & BRIC grant program	New
Structural Project	Roadway improvements including drainage capacity upgrade at Merrimack St in area of Mersen USA & pump station	Flooding	DPS/Engineering	Long-term/Low	Medium	Medium	BRIC grant program, Hazard mitigation assistance program (HMGP), and/or MVP action grant	Prior
Structural Project	Provide redundant water and sewer systems. Target focus of Plum Island which is vulnerable to breach	All Hazards	DPS	Long-term/Medium	High	High	BRIC grant program, Hazard mitigation assistance program (HMGP), and/or MVP action grant	Prior
Structural Project	Continue to coordinate with National Grid in protection of vulnerable Critical Assets of the National Grid Substation	All Hazards	Recycling, Energy & Sustainability/City Engineer	Long-Term/Medium	Low	High	National Grid	New
Structural Project	Provide emergency backup drinking water supply and/or an emergency interconnect to neighboring community's water supply in the event our supplies are compromised by drought, algae blooms, or another hazard	All Hazards	Director of DPS	Short-Term/High	High	High	State Revolving Funds (SRS), Building Resilient Infrastructure and Communities (BRIC) grant program	New
Structural Project	Design, permit, and construct a raw water line from Indian Hill Reservoir to the Upper and Lower Artichoke Reservoirs and pumping station in order to draw water from any one of the three reservoirs in the event the others are compromised by algae blooms, drought, or otherwise	Flooding/ Storms/ Drought	Director DPS/City Engineer	Short-Term/High	High	High	State Revolving Funds (SRS), BRIC grant program, Hazard mitigation grant program	New

	Table 8.1.1 Newburyport Mitigation Action Plan										
Category of Action	Description of Action	Hazard Addressed	Implementation Responsibility	Timeframe/ Priority	Cost	Benefit	Resources/ Funding	In Prior Plan?			
Structural Project -	stations to protect against FEMA 100-year flood and provide some resiliency for future SLR: Savory St, Whites Court, Hilton Wharf, and Water Street Pump Stations.	Storms/Sea Level Rise	Director of DPS	Long-Term/High	High	Medium	BRIC grant program, Hazard mitigation grant program, and/or MVP competitive grant program	Prior			
Property Protection -		Flooding/ Storms/Sea Level Rise	Planning Director/City Engineer	Long Term/Low	High	Low	Community preservation act funds, MVP competitive grant	Prior			
Structural Project	Strengthen the electrical grid by reducing conflicts with trees, burying utilities, and evaluating micro grids		Recycling, Energy & Sustainability	Short & Long- Term/Medium	High	Medium	MVP action grant and/or National Grid	New			
	protection measures throughout the City in line with	Flooding/Sea Level Rise/Storms	City Engineer/Conservation Administrator/Director DPS/City Engineer/Planning Director	Ongoing	n/a	Medium	General/ DPS Operating budget	New			
Structural Project	road above floodwater level	Flooding/Sea Level Rise/Storms	Director of DPS	Long-Term/High	High	Medium	BRIC grant program, Hazard mitigation assistance program (HMGP), and/or MVP action grant	New			
Structural Project	Raise the low-lying sections of the Plum Island Turnpike to keep road above floodwater level (in cooperation with Newbury)	Flooding/Sea Level Rise/Storms	Director of DPS/Newbury	Short & Long- Term/Medium	High	High	BRIC grant program, Hazard mitigation assistance program (HMGP), and/or MVP action grant	New			
Structural Project -	Market Square and State Street	Flooding/Sea Level Rise/Storms	Director DPS/City Engineer	Short & Long- Term/Medium	High	Medium	BRIC grant program, Hazard mitigation assistance program (HMGP), and/or MVP action grant	Prior			
Prevention -	Review, evaluate, and revise zoning and building regulations to improve resilience, water conservation, and discourage development in FEMA high hazard flood zones		Recycling, Energy & Sustainability/Planning Director	Immediate and Short- Term/High	Medium/ Low	Medium	City Staff	Prior			
Prevention -	Continue to enforce existing Wetlands Protection act regulations governing barrier beaches and other natural resource buffer zones. Define enforcement responsibilities	Sea Level Rise/Flooding/ Storms	Conservation Administrator/Planning Director	Ongoing	Low	Medium	City Staff	Prior			

Newburyport Multi-Hazard Mitigation Plan 2022

		Table 8.	1.1 Newburyport Mit	igation Action P	lan			
Category of Action	Description of Action	Hazard Addressed	Implementation Responsibility	Timeframe/ Priority	Cost	Benefit	Resources/ Funding	In Prior Plan?
Prevention/ Public Education & Awareness	Develop a task force with Newbury to create and implement a long-term, sustainable, science-based plan to address the challenges facing Plum Island. Continue to work with the Merrimack River Beach Alliance, the Plum Island Foundation, the U.S. Army Corp of Engineers, Legislators and State Agencies in this process	Flooding/Sea Level Rise/Storms	Chief of Staff/Conservation Administrator	Short & Long- Term/Medium	Low	Medium	City Staff	New
Prevention	Evaluate alternative access options to Plum Island	Flooding/Sea Level Rise/Storms	Planning Director/City Engineer	Long-term/Medium	Medium	Medium	City Staff/ Consultants	New
Public Education & Awareness	Develop and implement an automated water quality monitoring and warning system to protect residents from the health risks associated with combined sewer overflows (CSO's). Continue to work with legislators to support efforts to upgrade upriver wastewater treatment facilities to reduce CSO's	Flooding	Chief of Staff	Immediate/High	Medium	High	American Rescue Plan funds	New
Prevention -	Continue enforcing EPA's MS4 permit requirements by implement a storm water/impervious surfaces management program and updating city's stormwater conveyance system as necessary	Flooding	City Engineer	Ongoing	Medium	Medium	City Staff	Prior
Public Education & Awareness	Develop recommendations and educational materials for personal resilience to assist and educate residents and other stakeholders to make their households resilient to flooding, storms and other hazards	All Hazards	Recycling, Energy &Sustainability/Planning Director/Conservation Administrator	Immediate & Short- Term/High	Low	Medium	City Staff/Local emergency management team/Merrimack River Beach Alliance	Prior
Prevention	Promote the need for the MBTA to improve the resiliency of the rail service in light of SLR and other climate hazards	Flooding/Sea Level Rise/Storms	Chief of Staff	Immediate/Medium	Low	Low	City Staff	New
Emergency Services/ Protection	Identify and procures an emergency shelter on Plum Island for public safety crews and necessary equipment	Flooding/Sea Level Rise/Storms	Fire Chief	Short-term	High	High	Hazard Mitigation Grant funds and or City Bond funds	New
Structural Project	Implement design and construction of upgrades to the Central Waterfront Park and repair of the central waterfront bulkhead to address projected sea level rise.	Flooding/Sea Level Rise/Storms	Planning Department	Short-term	High	Medium	Hazard Mitigation Grant funds and PARC Grant	New

	Table 8.1.1 Newburyport Mitigation Action Plan										
Category of Action	Description of Action	Hazard Addressed	Implementation Responsibility	Timeframe/ Priority	Cost	Benefit	Resources/ Funding	In Prior Plan?			
Property Protection -	Evaluate mitigation measures to address flooding in the low-lying areas of the Business Park.	Flooding	Department of Public Services	Short-term	High	Low	City Staff- City Engineer and DPS	Prior			
Emergency Services/ Protection	Inventory and assess all generators at public and emergency facilities and implement a program to establish full functionality of all	All Hazards	Department of Public Services/Fire Chief	Short-term	Medium	High	BRIC grant program, HMPG program, City funds from the Fire Dept., Dept. of Public Services, and School Dept.	New			
Emergency Services Protection	Purchase a High-Water Vehicle	Flooding/Sea Level Rise/Storms	Fire Chief	Immediate	High	High	City funds including Fire Dept. and Capital Improvement Plan Funds	New			
Public Education & Awareness	To reduce risks from all natural hazards, establish and maintain City web page describing "tips and techniques" for hazard preparedness, mitigation, and response, with links to the MEMA and FEMA hazard mitigation websites.	All Hazards	Mayor/Fire Chief	Immediate/High	Low	High	Hosted across multiple City websites including Public Safety (Police and Fire), Dept. of Public Services, Public Health, Planning and Development.	New			

SECTION 9. PLAN ADOPTION AND MAINTENANCE

This section discusses how the Newburyport Multi-Hazard Mitigation Plan will be adopted by the city, and how the Plan will be evaluated and maintained over time. It also discusses how the public will continue to be involved in the hazard mitigation and vulnerability planning process.

9.1 Plan Adoption

Under 44 CFR Part 201, hazard mitigation plans must be sent to the State Hazard Mitigation Officer (SHMO) for initial review and coordination. The State then forwards the plan to FEMA for formal review and approval. The final draft is submitted to the State and FEMA before seeking formal adoption of the plan by the Town. FEMA reviewers document their evaluation of the Plan using the Local Mitigation Plan Review Tool. A copy of the Tool is included in Appendix E.

Mitigation plans are approved by FEMA when they receive a "satisfactory" for all requirements outlined under 44 CFR Section 201.6. Once a final plan is submitted, the FEMA Regional Office generally completes the review within 45 days. If the plan is not approved, the FEMA Regional Office will provide comments on the areas that need improvement. FEMA will the complete review of the re-submittal within 45 days of receipt.

Once FEMA determines that the Plan is "approvable pending adoption", the local adoption process is initiated. The plan is adopted by an affirmative vote of Newburyport's City Council. A resolution signed by the City Council chair serves as documentation of the plan's local adoption. Upon submittal of the signed resolution to FEMA, FEMA issues a letter notifying the community of FEMA's approval of the plan.

9.2 Plan Maintenance

The measure of success of the Newburyport's HMP will be the number of identified mitigation actions implemented, either wholly or in part. For Newburyport to become more disaster and climate-resilient and better equipped to respond to natural hazards, there must be a coordinated effort between elected officials, appointed bodies, municipal staff, regional and state agencies, other

44 CFR Requirement

44 CFR Part 201.6c(4)(i): The plan shall include a plan maintenance procedure that includes a section describing the method and schedule of monitoring, evaluating, and updating the mitigation plan within a five-year cycle.

stakeholder groups, and the general public. Thus, monitoring, evaluating, and updating the hazard mitigation plan are critically important steps to maintaining a viable, effective plan.

Accordingly, the Core Team of Resiliency Committee members will meet annually to review the plan. At this meeting, the Core Team will review the hazard mitigation measures that have been implemented as of that date and determine if these measures have had

an impact on mitigating the overall hazard risk(s). In the case of *structural* projects, in particular, this review will include site visits to locations where the measures have been implemented. Mitigation measures that have not been implemented will be reviewed to determine if they will still minimize natural hazards or if they are no longer a viable option. Additionally, the Core Team will determine any new options to include in an update of the plan.

Evaluation of the hazard mitigation plan in its entirety will be undertaken on a 5-year basis according to the Disaster Mitigation Act of 2000 or following any significant natural hazard disaster. Any new problems that arise will be reviewed by the Core Team and incorporated into the updated HMP. The updated plan will incorporate new or modified mitigation actions as determined from the review. This allows for updates to be made as the community grows and changes. The City's Conservation Agent, Planning Director, and City Engineer will oversee the Core Team's involvement in the review and updating process.

The public will be given opportunities to participate in the plan evaluation and updating process and to provide comments for consideration by the Core Team. Residents, businesses, and other potential stakeholders will be notified when plan updating deliberations are scheduled, and when significant hazard mitigation issues are brought before the City Council. Notification will be done through posting of meeting agendas in City Hall and on the Newburyport website.

Newburyport will be responsible for updating the Hazard Mitigation portion of the plan every five years following FEMA approval. Ideally, the plan update will begin in the fourth year following approval of the plan to remain eligible for FEMA mitigation grants, specifically the new Building Resilient Infrastructure Communities or BRIC grants. Newburyport may wish to pursue an update of its individual plan or rejoin the Merrimack Valley Regional Multi-Hazard Mitigation Plan which is anticipated to be updated in the coming year. Funding sources for the update may include the FEMA Hazard Mitigation Grant Program as well as the BRIC grants. Both grants provide 75% of the funding with a 25% local cost share.

10.1 Pivotal Role of Local Government

The City of Newburyport will play a pivotal role in hazard mitigation, especially in the area of floodplain management. The municipal Inspectional Services Department, Conservation Commission, and Board of Health have legal responsibilities to implement local floodplain bylaws, the National Flood Insurance Program (NFIP), construction standards incorporated into the Massachusetts State Building Code, floodplain guidelines incorporated into the Wetlands Protection Act, and Title 5 of the State Environmental Code (on-site wastewater disposal). **Table 10.1.1** on the following page provides a summary of local boards and departments and their corresponding roles in implementing the action items contained in the Hazard Mitigation Action Plans.

To the extent possible, these community-specific mitigation actions have been directed toward a particular department or board to assign responsibility and accountability and to increase the likelihood of implementation.

10.2 Broad Integration of Plan

The incorporation of the recommendations of this Plan into other local and regional planning documents and procedures is not only strongly encouraged but indeed is a requirement of the federal and state hazard mitigation planning process. Such planning documents typically include but are not limited to comprehensive or master plans, capital improvement plans, stormwater management plans, open space and recreation plans, building codes, zoning bylaws, subdivision regulations, and local wetland bylaws. Elected officials should be directly involved in the implementation of the Plan, as they can provide direction by establishing timeframes, assigning implementation responsibilities, and providing budget and financial oversight for implementation funding.

The plan maintenance process shall include a process by which local governments incorporate the requirements of the mitigation plan into other planning mechanisms such as comprehensive or capital improvement plans, when appropriate.

Excellent resources for Newburyport to consult for this work include *Hazard Mitigation: Integrating Best Practices into Planning*⁵⁶ and *Integrating Hazard Mitigation Into Local Planning:* Case Studies and Tools for Community Officials.⁵⁷

⁵⁶ American Planning Association. 2010. Hazard Mitigation: Integrating Best Practices into Planning. <u>https://s3-us-gov-west-1.amazonaws.com/dam-production/uploads/20130726-1739-25045-</u> 4373/pas 560 final.pdf

⁵⁷ FEMA. 2013. Integrating Hazard Mitigation Into Local Planning: Case Studies and Tools for Community Officials. <u>https://www.fema.gov/emergency-managers/national-preparedness/frameworks/community-recovery-management-toolkit/recovery-planning/integrating-mitigation/case-studies-tools-community</u>.

Department, Board, or Committee	Function	Effect on Loss Reduction	
Building Department/Inspector	The building inspector enforces the Massachusetts State Building Code that incorporates NFIP construction standards. The building inspector also enforces locally adopted zoning bylaws. The state building code also contains sections on wind, snow, structural loads, and seismic retrofitting. The building inspector is also responsible for assuring compliance with the local floodplain bylaw.	Insures that NFIP standards and other mitigation standards are uniformly applied across the community.	
Department of Public Services (DPS)	The Department of Public Services is primarily responsible for municipal drainage and stormwater management issues, taking the lead in ensuring compliance with EPA MS4 Stormwater Permit requirements.	Ongoing maintenance and upgrading of local stormwater systems is crucial to reducing and managing flood risks.	
Conservation Commission	The Conservation Commission is responsible for implementing the Wetlands Protection Act (MGL Chapter 131, Section 40, 310 CMR 10.00) including the Rivers Protection Act of 1996 (MGL Chapter 258, 310 CMR 10.58) and the Stormwater Standards. Newburyport also reviews projects under the Newburyport Wetlands Protection Ordinance and associated regulations. The Conservation Commission reviews, approves, or denies applications for projects in the 100-year floodplain, in the floodplain of a small water body not covered by a FEMA study, within 100 feet of any wetland or 200 feet of any river or stream. In Newburyport, the Conservation Administrator assists the building inspector in enforcing floodplain requirements.	These regulations contain performance standards that address flood control and storm damage prevention. The regulations also address stormwater management. Newburyport's Wetland Regulations incorporate 40" of sea level rise (by 2070) into the design and construction of structures and other activities proposed in Land Subject to Coastal Storm Flowage	
Water and Sewer Commission	The Water and Sewer Commission assists with oversight for water and sewer business operations, budgets, policies and procedures.	These policies relate to the city's water supply and the operation of the city's sewage system.	
Open Space Committee	The Open Space Committee was established in April 2001 as an advisory committee to the Mayor pursuant to the Master Plan. The OSC is charged generally with advocating for the protection of open space and specifically to monitor opportunities for open space acquisition.	Promoting open space acquisition and protection through identifying and evaluating parcels, gaining knowledge around relevant tools and resources, building relationships, seeking funding, and providing education and outreach	
Resiliency Committee	The Resiliency Committee was formed in 2015 to take on the responsibility of evaluating Newburyport's risks from Climate Change and Sea Level Rise, and to develop and help execute a plan to mitigate those risks. After significant research and consultation with community stakeholders, Newburyport's Resiliency Plan was published in October 2020.	The Resiliency Committee now advocates for and oversees implementation of the Resiliency Plan's recommendations.	
Planning Board	The Planning Board has authority under MGL Chapter 41 and implements local subdivision regulations. The Planning Board ensures that new development incorporates state and federal stormwater management "best management practices".	The Planning Board is responsible for ensuring new and re- development complies with all local regulations.	

Board of Health	The Board of Health implements the State Environmental Code, Title 5, and 310 CMR 15: Minimum Requirements for the Subsurface Disposal of Sanitary Sewage. Newburyport has adopted local board of health requirements that are stricter than the state requirements.	Title 5 protects public health and mitigates losses due to adverse effects of improper sewage treatment in high hazard areas. The Board is also involved in issues related to water quality and infectious diseases following a disaster.
Mayor and City Council	In Newburyport, an elected mayor and eleven-member City Council is responsible for overseeing all aspects of City Government.	The City Council must adopt the Hazard Mitigation Plan. Also, their approval is necessary for hazard mitigation grant applications and potential projects.
Emergency Management Department	Newburyport has an emergency management director (fire chief) who is responsible for local emergency response and recovery, as well as mutual aid.	Emergency managers play a primary role in the development of the Comprehensive Emergency Management Plan (CEMP), as well as other plans required by MEMA and FEMA.

While Newburyport has a dynamic team to address vulnerabilities in its city, some of the challenges it faces, such as sea-level rise and coastal erosion, are not isolated to municipal boundaries. Therefore, future steps would involve developing and implementing a task force with the surrounding towns to implement a long-term, sustainable, science-based plan to address the multifaceted challenges facing adjoining jurisdictions such as Plum Island. This process would also involve continue to work with the Merrimack River Beach Alliance, the Plum Island Foundation, the U.S. Army Corp of Engineers, Legislators and State Agencies in this process. Additionally, a Municipal Resiliency Plan for Sea Level Rise/Storm Surge Climate Change should be developed. As part of this initiative, a resiliency coordinator should be hired to add municipal or regional circuit rider staff capacity to lead the effort.

SECTION 11. RESOURCES

Financial Resources

Appropriate action is needed to ensure that financial resources are available to implement hazard mitigation projects. The city of Newburyport is able to leverage funds through the following sources to address hazard mitigation activities:

- Capital improvements funding
- Authority to levy taxes for specific purposes
- Fees from water and sewer services
- Bonding capacity

In instances where additional funding is needed, Newburyport is well-situated to seek outside support through state and federal grants. In the past, Newburyport has received financial support from the Municipal Vulnerability Preparedness Program, American Rescue Plan Act, Building Resilient Infrastructure and Communities program, Hazard Mitigation Grant Program, National Grid funding, Community Preservation Act, and EPA Technical Assistance Grants.

Moving forward, Newburyport plans to continue to apply for funding to address vulnerability. Federal funding programs are available to eligible municipalities. The availability of current federal funding sources changes regularly and is dependent upon Congress' ongoing budget appropriations process. Currently, <u>www.grants.gov</u> is the comprehensive website to track available funding from federal agencies. Also, federal appropriations from Congress may be tracked through the Federal Registers at <u>www.federalregister.gov</u>.

The following is a summary of FEMA and other programs which fund hazard mitigation and resiliency projects and activities, including the primary sources of federal hazard mitigation funding in Massachusetts:

Table 11.1 FEMA and Other Funding Programs					
FEMA Program	Type of Assistance	Availability	Managing Agency	Funding Source	
National Flood Insurance Program (NFIP)	Pre-Disaster Insurance	Any time (pre- and post-disaster)	DCR Flood Hazard Management Program	Property Owner, FEMA	
Severe Repetitive Loss (SRL) (Part of the NFIP)	Grants to state emergency management offices to reduce damage to insured severe RLPs	Varies	MEMA	Up to 90% FEMA/ 10% state government	

Repetitive Flood Claims Program (RFC) (Part of the NFIP)	Grants to states and municipalities to reduce damage to insured RLPs	Any time	FEMA	100% FEMA
Community Rating System (CRS) (Part of the NFIP)	Disaster Insurance Discounts	Any time (pre- and post-disaster)	DCR Flood Hazard Management Program	Property Owner, FEMA
Flood Mitigation Assistance (FMA) Program	Cost-share grants for pre-disaster planning and projects	Annual pre-disaster grant program	DCR & MEMA	75% FEMA/25% local government or organization
Hazard Mitigation Grant Program (HMGP)	Post-disaster Cost- Share Grants	Post disaster program	DCR & MEMA	75% FEMA/25% local government or organization
Building Resilient Infrastructure and Communities (formerly the Pre-Disaster Mitigation Program)	National, competitive grant program for multiple hazard mitigation projects and "all hazards"	Annual pre-disaster mitigation program	DCR & MEMA	75% FEMA/25% local government or organization
Small Business Administration (SBA) Mitigation Loans	Pre- and Post-disaster loans to qualified businesses	Ongoing	MEMA	Small Business Administration
Infrastructure Support Program (formerly Public Assistance)	Post-disaster aid to state and local governments	Post Disaster	MEMA	FEMA
Municipal Vulnerability Preparedness Action Grans	Funding for designated MVP Communities to advance priority climate adaptation actions to address climate change	Annually	EOEEA	State of Massachusetts

The Federal Emergency Management Agency (FEMA), which is part of the Department of Homeland Security, administers the National Flood Insurance Program, the Community Rating System, the Flood Mitigation Assistance Program (FMA), the Hazard Mitigation Grant Program (HMGP), and the Building Resilient Infrastructure and Communities (BRIC). These programs are administered in coordination with DCR and MEMA. FEMA also prepares and revises flood insurance studies and maps as well as information on past and current acquisition, relocation, and retrofitting programs. The Mitigation Division provides expertise in other natural and technological hazards, including hurricanes, earthquakes, and hazardous materials, to state and local government agencies.

Immediately following Presidential declarations, FEMA's Response and Recovery Division works closely with state agencies, especially MEMA, in assisting in the short- term and long-term recovery effort. FEMA assists disaster-affected communities through emergency funding programs, such as Infrastructure Support and Human Services. In coordination with its Mitigation Division, Response and Recovery distributes information on hazard mitigation methods and acquisition/relocation initiatives as well as coordinating HMGP grants for mitigation projects to protect qualifying damaged public and private nonprofit facilities through the Infrastructure Support Program. In addition to these programs, FEMA also provides disaster recovery and hazard mitigation training at its Emergency Management Institute in Emmitsburg, Maryland.

For the latest information on this and other mitigation funding programs, go to FEMA's website at <u>www.fema.gov.</u>

National Flood Insurance Program (NFIP)

The National Flood Insurance Program (NFIP), established by Congress in 1968, provides flood insurance to property owners in participating communities. This program is a direct agreement between the federal government and the local community that flood insurance will be made available to residents in exchange for community compliance with minimum floodplain management requirements. Since homeowners' insurance does not cover flooding, a community's participation in the NFIP is vital to protecting property in the floodplain, as well as ensuring that federally backed mortgages and loans can be used to finance property within the floodplain.

Pursuant to the Flood Disaster Protection Act of 1973, any federal financial assistance related to new construction or substantial improvements (greater than 50% of a structure's market value) of existing structures located in the 100-year floodplain is contingent on the purchase of flood insurance. Such federal assistance includes not only direct aid from agencies but also from federally insured institutions. Thus, for property owners to be eligible for purchasing flood insurance, their respective community must be participating in the NFIP and in compliance with the NFIP.

Communities participating in the NFIP must:

- Adopt the Flood Insurance Rate Maps as an overlay regulatory district;
- Require that all new construction or substantial improvement to existing structures in the flood hazard area will be elevated; and
- Require design techniques to minimize flood damage for structures being built in high hazard areas, such as floodways or velocity zones.

The NFIP standards are contained in the Massachusetts State Building Code (Chapter 16 of the 9th Edition), which is implemented at the local level by municipal building inspectors. In Massachusetts, 341 out of 351 (97%) of Massachusetts municipalities participate in the NFIP.

Severe Repetitive Loss Program

The Severe Repetitive Loss Program was authorized by the Bunning-Beruter-Blumaneauer Flood Insurance Reform Act of 2004 with amended the National Flood Insurance Act of 1968 to provide funding to reduce or eliminate the long-term risk of flood damage to severe repetitive loss structures.

MEMA must apply for these funds but may work with other state agencies or local governments. Priority is given to programs that will have the greatest cost-benefit ratio in keeping with the purpose of the program. Grants may be used for acquisition, demolition, and relocation but cannot be used for maintenance or repair.

Funds are allocated to the state based on the percentage of validated SRL properties and may be up to 90 percent federal and 10 percent local.

Repetitive Flood Claims Program (RFC)

The Repetitive Flood Claims Program was authorized by the Bunning-Beruter-Blumaneauer Flood Insurance Reform Act of 2004 which amended the National Flood Insurance Act of 1968 to provide funding to reduce the risk of flood damage to repetitive loss structures.

The program is 100 percent federally funded and the applicant must demonstrate that the proposed activities cannot be funded under the Flood Assistance Program. (See below.)

Community Rating System (CRS)

A voluntary initiative of the NFIP, the Community Rating System (CRS) encourages communities to undertake activities that exceed the minimum NFIP floodplain management standards. Communities participating in CRS can reduce flood insurance premiums paid by policyholders in that community by performing such activities as maintaining records of floodplain development, publicizing the flood hazard, improving flood data, and maintaining open space. Communities can gain additional credit under CRS by developing a flood mitigation plan.

Flood Hazard Mitigation Program

Authorized by the National Flood Insurance Reform Act of 1994, the Flood Mitigation Assistance (FMA) program makes cost-share grants available for flood mitigation planning and projects, such as property acquisition, relocation of residents living in floodplains, and retrofitting of existing structures within a floodplain. Flood hazard mitigation plans, approved by the state and FEMA, are a pre-requisite for receiving FMA project grants. Communities contribute a minimum of 25% of the cost for the planning and project grants with an FMA match of up to 75%.

Hazard Mitigation Grant Program (HMGP)

Established under Section 404 of the Stafford Disaster Relief and Emergency Relief Act (PL 100-707), this program provides matching grants (75% Federal, 25% Local) for FEMAapproved hazard mitigation projects following a federally declared disaster. These grants are provided on a competitive basis to state, local and tribal governments as well as nonprofit organizations. The grants are specifically directed toward reducing future hazard losses and can be used for projects protecting property and other resources against the damaging effects of floods, hurricanes, earthquakes, high winds, and other natural hazards. HMGP in Massachusetts encourages non-structural hazard mitigation measures, such as:

- The acquisition of damaged structures and deeding the land to a community for open space or recreational use
- Relocating damaged or flood-prone structures out of a high hazard area
- Retrofitting properties to resist the damaging effects of natural disasters. Retrofitting can include wet- or dry-flood proofing, elevation of the structure above flood level, elevation of utilities, or proper anchoring of the structure.

Funding proposals are submitted for review by Massachusetts' Interagency Hazard Mitigation Committee with final approval given by the Commissioner of the DCR, the Director of MEMA, and FEMA's Region I office. The committee uses a list of criteria which is described on page 34 of this plan as well as in the Hazard Mitigation Grant Program Administrative Plan.

Pre-Disaster Mitigation (PDM) Program now BRIC

The Pre-Disaster Mitigation (PDM) Program was authorized by §203 of the Robert T. Stafford Disaster Assistance and Emergency Relief Act (Stafford Act), 42 USC, as amended by §102 of the Disaster Mitigation Act of 2000. As a result of amendments by the Disaster Relief and Recovery Act of 2018, the Pre-Disaster Mitigation program is being replaced with the new <u>Building Resilient Infrastructure and Communities (BRIC)</u> program. The BRIC program aims to shift the federal focus away from reactive disaster spending and toward research-supported, proactive investment in community resilience. All applicants must be participating in the National Flood Insurance Program (NFIP) if they have been identified through the NFIP as having a Special Flood Hazard Area (a Flood Hazard Boundary Map (FHBM) or Flood Insurance Rate Map (FIRM) has been issued). Also, the community must not be suspended or on probation from the NFIP. Applicants must also have an up to date HMP.

Small Business Administration Mitigation Loans

The SBA's Regional Mitigation Loan Program was developed in support of FEMA's Regional Mitigation program. Businesses proposing mitigation measures to protect against flooding must be in a Special Flood Hazard Area (SFHA). Businesses may consult FIRM maps to find out if the business is in a SFHA. For information pertaining to hazard identification mapping and floodplain management, contact the local community floodplain administrator or the State floodplain manager. To apply for a regional mitigation loan, a business must submit a complete Regional Mitigation Small Business Loan Application within the 30-day application period announced by the SBA. SBA will publish a Notice of Availability of Regional Mitigation Loans in the Federal Register announcing the availability of regional mitigation loans each fiscal year. The Federal Register notice will designate a 30-day application period with a specific opening date and filing deadline, as well as the locations for obtaining and filing loan applications. Furthermore, SBA will coordinate with FEMA and will issue press releases to the local media to inform potential loan applicants where to obtain loan applications.

Public Assistance Program

The Federal Emergency Management Agency's Public Assistance Program is triggered for counties declared major disaster areas by the President. Communities and public agencies in designated counties are eligible for partial reimbursement (75%) of expenses for emergency services and removal of debris, and partial funding (75%) for repair and replacement of public facilities that were damaged by the declared disaster. Massachusetts funds an additional 12.5% of these projects. Eligible applicants for Infrastructure Assistance include:

- □ State government agencies/departments;
- Local governments (county, city, town, village, district, etc.); and
- Certain private non-profit organizations.

Typical federal/state aid can include:

- Reimbursable payment of 87.5% of the approved costs for emergency protective measures deployed in anticipation of the storm;
- Reimbursable payment of 87.5% of the approved costs for emergency services and debris removal;
- Payment of 75% of the costs for the permanent repair or replacement of damaged public property; and
- Funding for repair/construction of damaged highways other than those on the Federal Aid System.

Special Appropriations Following State Disasters

Although there is no separate state disaster relief fund in Massachusetts, the state legislature will enact special appropriations for those communities sustaining damages following a natural disaster that are not large enough for a presidential, disaster declaration.

State Revolving Fund

This statewide loan program through the Executive Office of Energy and Environmental Affairs assists communities in funding local stormwater management projects which help to minimize and/or eliminate flooding in poor drainage areas.

Massachusetts Land and Water Conservation Fund

The Land and Water Conservation Fund provides 50 percent of the total project costs to purchase land for conservation or recreation purposes. Massachusetts has spent \$95.6 million since 1965 to purchase almost 4,000 acres of land under this program. The program is administered by DCR.

Major Flood Control Projects

The state provides 50% of the non-federal share on the costs of major flood control projects developed in conjunction with the U.S. Army Corps of Engineers. This program is managed by DCR.

Municipal Vulnerability Preparedness (MVP) Action Grants

Once designated an MVP Community, the Executive Office of Energy and Environmental Affairs (EEA), through the MVP Program, offers funding resources to advance climate adaptation actions identified in the community's MVP Summary of Findings. In FY21, the MVP Program offered over \$10 million in Action Grant Funding.

Social Resources

Knowledge networks are another major resource for Newburyport in addressing vulnerability. On a regional scale, Newburyport collaborates with a number of different groups, coalitions, and organizations to share knowledge, resources, and skills to strengthen its resiliency in the face of climate change and environmental hazards. These collaborations include:

- Merrimack Valley Planning Commission: Newburyport became a designated MVP community in 2018 and participates as an active MVPC Commissioner to oversee and assist in regional planning function for the 15 cities and towns in the district.
- Eight Towns and the Great Marsh: Newburyport participates (through one active representative) on this Upper North Shore Local Governance Committee (LGC) for the Massachusetts Bays National Estuary Program.
- Great Marsh Coalition: Newburyport collaborates on region-wide climate planning and adaptation measures, such as the Great Marsh Coastal Adaptation Plan (2017), a detailed document outlining local strategies for adaptation planning that integrates climate smart conservation.
- Merrimack River District Commission: Newburyport collaborates on river-wide concerns regarding water quality and health. For example, the city participated in a pilot program to develop a pre-notification alert system for swimming and boating hazards related to combined sewage overflow (CSO) hazards.
- Merrimack River Beach Alliance: Newburyport participates in MRBA, a longstanding ad hoc group of municipal, state and federal officials; elected officials; and local residents led by Senator Tarr. The focus of the MRBA is on short and longterm management and protection of Salisbury and Plum Island Beaches.
- Regional Emergency Planning Committee: Newburyport, together with the municipalities of Amesbury, Boxford, Georgetown, Ipswich, Merrimac, Newbury, Rowley, Salisbury, and West Newbury comprise the Northern Essex Regional Emergency Planning Committee (REPC). Emergency Planning Committees are

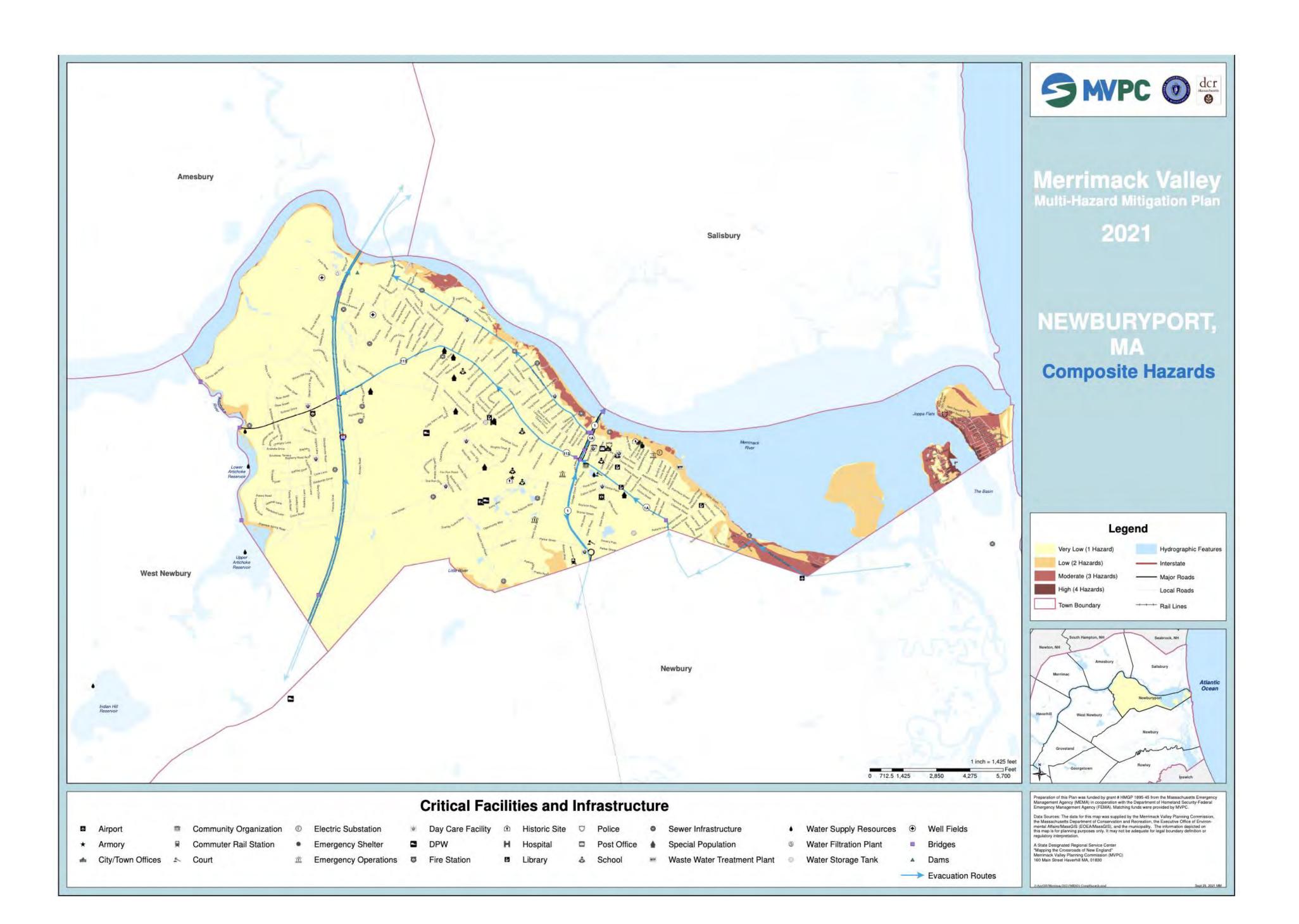
responsible for protecting their communities from incidents involving hazardous materials.

- Merrimack Valley Stormwater Collaborative: Newburyport, together with 14 towns within the watershed, convene monthly to discuss stormwater related issues and projects within the region to facilitate knowledge-sharing and skill building.
- Educational Collaborations: Newburyport partners with local and regional universities and academic institutions to research and address a range of environmental topics. This collaboration provides technical support and knowledge to Newburyport while offering real-life opportunities to study and address science-related projects.

Appendices

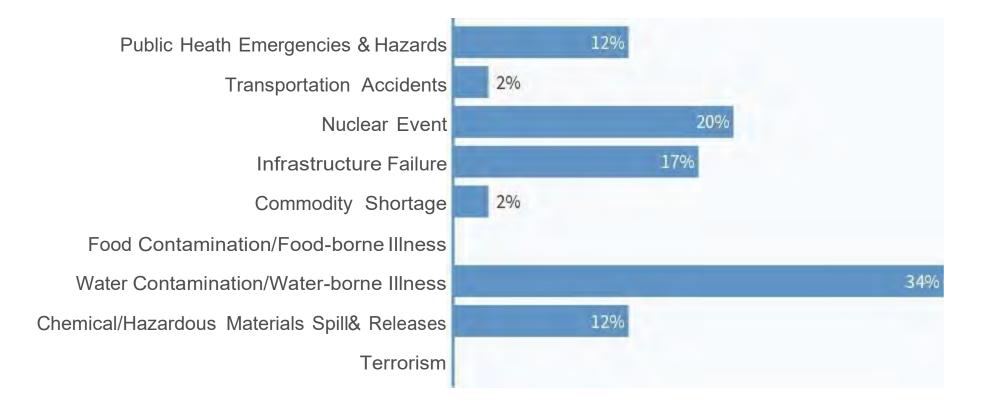
Appendix A: Composite Hazards Map

Newburyport Multi-Hazard Mitigation Plan 2022

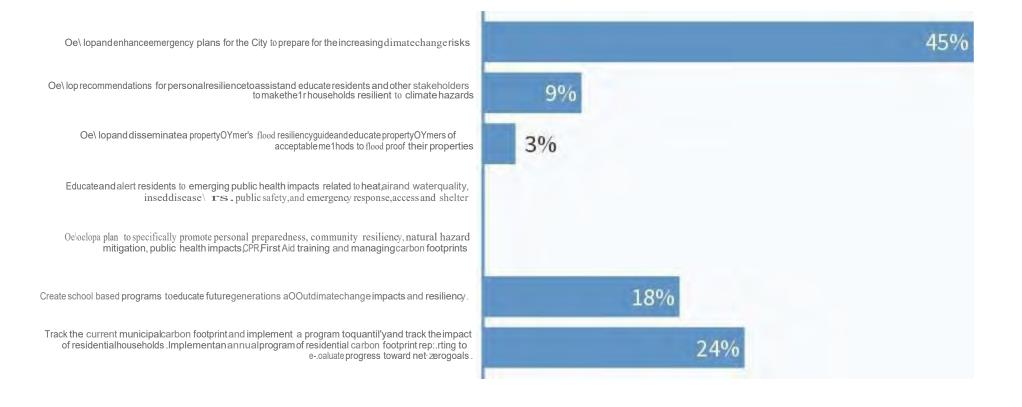


Appendix B: Survey Results

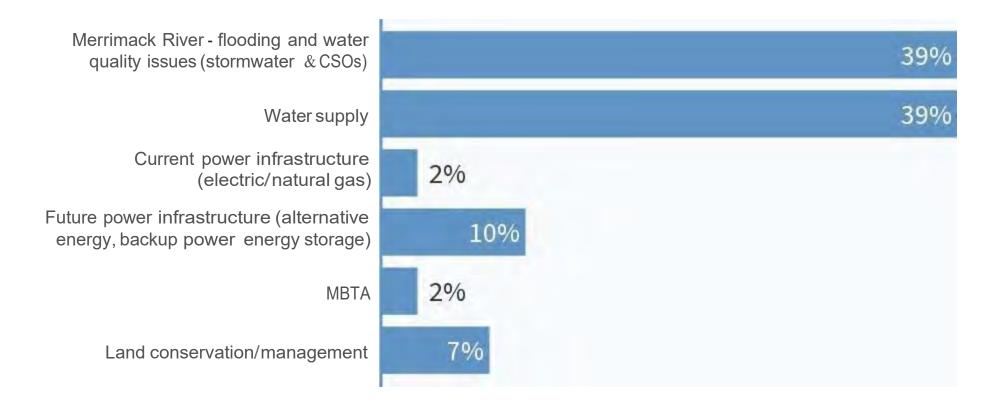
Which non-natural hazards should be in Newburyport's Hazard Mitigation Plan:



City-wide education and outreach actions for hazard mitigation and resiliency (choose top 2)



Vulnerabilities requiring inter-community/regional action (choose top 2)



City-wide regulatory and budgetary actions for hazard mitigation and resiliency (choose top 2)

Review, evaluate, and revise zoning and building regulations to improve resilience, water conservation, energy efficiency and discourage development in the FEMA high

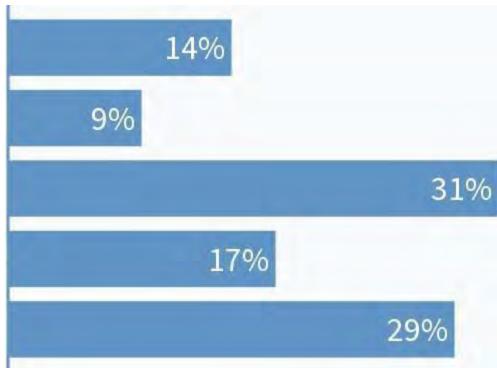
hazard flood zones

Develop and adopt a design flood elevation for all new and proposed renovations of properties in the FEMA high hazard flood zones

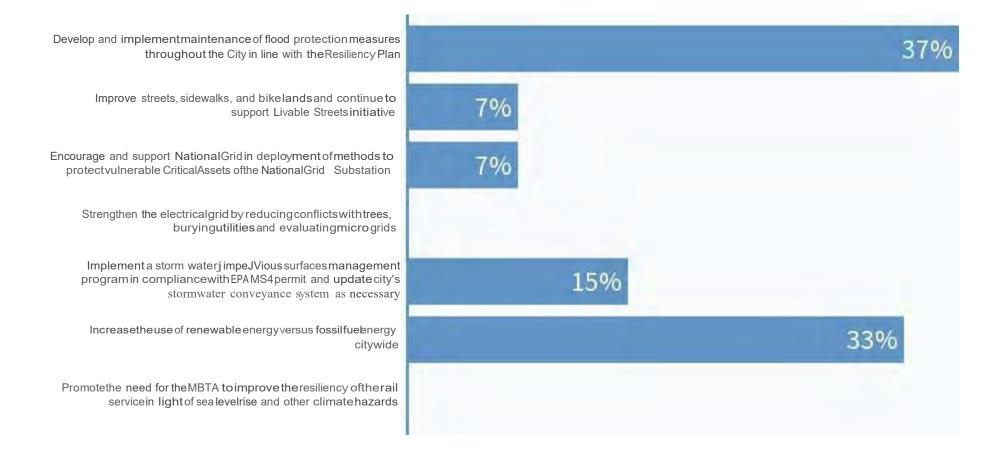
Implement an automated water quality monitoring and warning system to protect residents from the health risks associated with combined sewer overtlows (CSO's). Continue support of efforts to upgrade upriverwastewater treatment facilities.

Evaluate future changes in revenue streams as sea level rise and inundations begin to claim shoreline properties. Develop alternative revenue streams and incentives to fund the city" sbudget and pay for resiliency and emergency response activities.

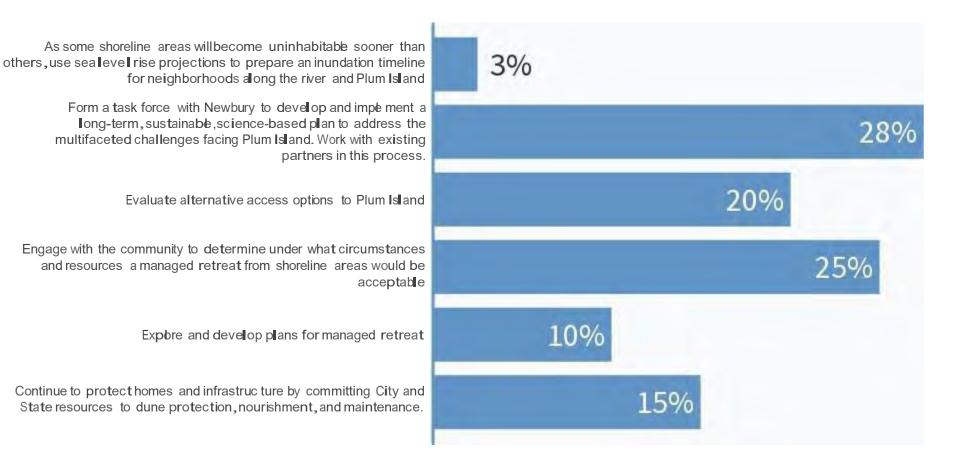
Adopt new local regulations that require established sea level rise projections to be considered in all new building development plans.



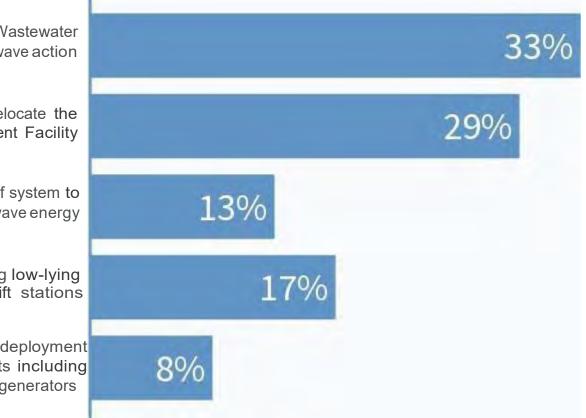
Actions to protect other infrastructure (choose top 2)



Priority actions for Plum Island



Wastewater Treatment Priority Actions {choose top 2}



Continue to construct barriers to protect the Wastewater Treatment Facility from storm surge and wave action

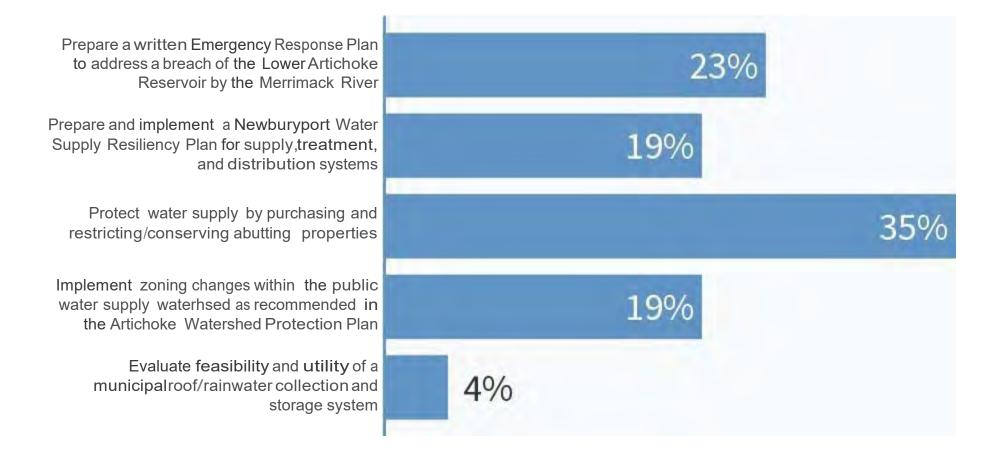
Prepare a feasibility study to eventually relocate the Wastewater Treatment Facility

Evaluate a living shoreline and offshore reef system to reduce fetch and attenuate wave energy

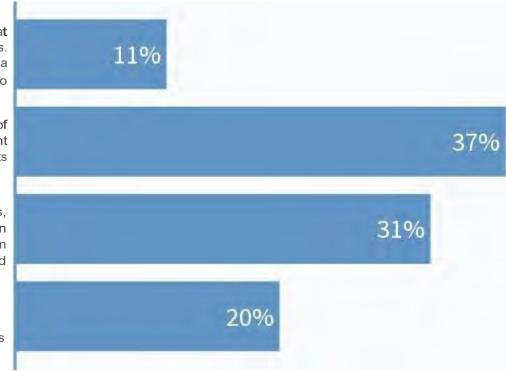
Develop and prioritize plans for protecting low-lying sewer lift stations

Acquire portable flood barriers for emergency deployment during storms to protect critical components including buildings,electrical equipment, and backup generators

Priority Actions to Address Water Supply {choose top 2}



Priority actions to address waterfront neighborhoods and amenities (choose top 2)



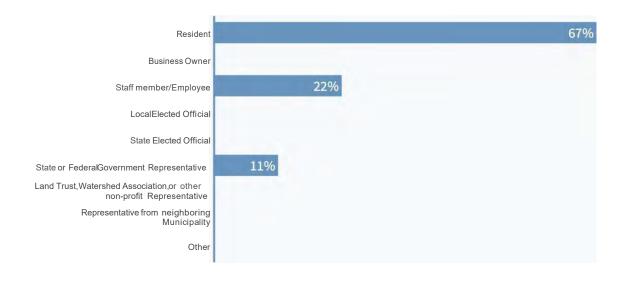
For Cashman Park, perform a design, cost and feasibility analysis that considers elevating or protecting the park to preserve its amenities vs. adapting and transitioning the area to alternate uses in a rising sea and surge scenario

Engage and educate Centra IWaterfront committees,Chamber of Commerce,business and property owners so that future development and planning reflects future climate impacts

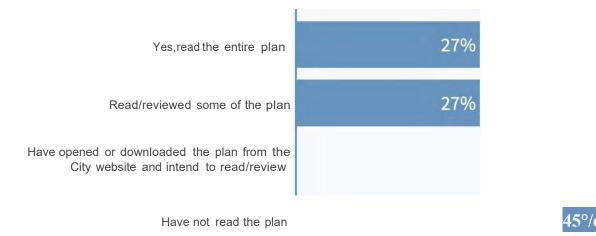
As some shoreline areas willbecome uninhabitable sooner than others, use sealevel rise and inundation projections to prepare an inundation timeline for neighborhoods along the River and Plum Island

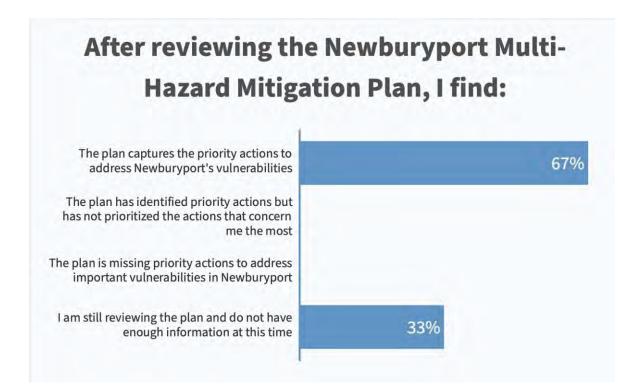
Considerincentives and if necessary,new regulations,within the FEMA A and V flood zones to encourage the resiliency of private properties

What is your affiliation/role with the City of Newburyport?



Have you read or reviewed Newburyport's updated Hazard Mitigation Plan





Question 4: "if there is an action you believe should be given higher priority, please identify it here"

Response	Via		Phone number	A Received at
treet and sewer looding	pollev.com/merrir	nackval4 5 arah Tappan		May 18, 2022, 03:30 PM
Continuing to work with Newbury to assess the cost- benefit of Plum sland Turnpike mprovements and bverall Plum Island resiliency/retreat	pollev.com/merrin	nackval4 27 isten		May 18, 2022, 03:30 PM
Coastal flooding	pollev.com/merrir	nackval4 38 rah Tappan		May 18, 2022, 03:29 PM
Continued focus on the water supply orotection, all aspects (artichoke dam, indian hill pipeline, and emergency nterconnect).	pollev.com/merrir	nackval4 Za rah Tappan		May 18, 2022, 03:29 PM
iea Level Rise and ncreased flooding of oastal areas	pollev.com/merrir	nackval4 2n drew Port		May 18, 2022, 03:29 PM

Appendix C: Meeting Agendas

Newburyport Multi-Hazard Mitigation Plan

Planning Meeting

Zoom Meeting

August 18, 2021, 3 P.M. – 4 P.M.

AGENDA

I. Welcome – Newburyport
II. Overview of Hazard Mitigation Planning Process – Merrimack Valley Planning Commission (MVPC)
III. Review of Priority Actions from Municipal Vulnerability Preparedness Plan and Climate Resiliency Plan – MVPC – Poll Everywhere Activity
Poll Everywhere Link: https://pollev.com/merrimackval427
IV. Discussion
V. Next Steps in Hazard Mitigation Plan (HMP) Process
Virtual Meeting Information:
Please click the link below to join the webinar:
https://us02web.zoom.us/j/84659075838
Or via Phone (audio only): +1 301 715 8592
Webinar ID: 846 5907 5838
For more information, please contact Julia Godtfredsen at: Email: jgodtfredsen@cityofnewburyport.com Phone: 978-465-4400
Current plans can be viewed on the Resiliency Committee Website at the following link: https://www.cityofnewburyport.com/planning-development/resiliency-sustainability

Newburyport Multi-Hazard Mitigation Plan

Listening Session

Zoom Meeting

May 18th, 2022 3 P.M. – 4 P.M.

AGENDA

Ι.	Welcome – Newl	buryport
II.	Overview of Haz Commission (M\	ard Mitigation Planning Process – Merrimack Valley Planning /PC)
111.		uryport Multi-Hazard Mitigation Plan – Hazards, Vulnerabilities and - Merrimack Valley Planning Commission
IV.	Public Input	
V.	Next Steps in Ha	zard Mitigation Plan (HMP) Approval Process
Direc	t zoom meeting l	ink:
	https://us06web.zo	00m.us/s/85918075418
	Or join webinar wi	th the following methods
	Phone one-tap	
	Phone one-tap:	US: <u>+13126266799,,85918075418</u> # or <u>+16465588656,,85918075418</u> #
	Join by Telepho	one
	• • •	dial a number based on your current location.
	Dial:	US : +1 312 626 6799 or +1 646 558 8656 or +1 301 715 8592 or +1 346 248 7799 or +1 720 707 2699 or +1 253 215 8782
	Webinar ID:	859 1807 5418
Email: Phone Curre	igodtfredsen@ci : 978-465-4400 nt plans can be vie	ease contact Julia Godtfredsen at: tyofnewburyport.com ewed on the Resiliency Committee Website at the following link:

Appendix D: Plan Review Tool

APPENDIX A: LOCAL MITIGATION PLAN REVIEW TOOL

The *Local Mitigation Plan Review Tool* demonstrates how the Local Mitigation Plan meets the regulation in 44 CFR §201.6 and offers States and FEMA Mitigation Planners an opportunity to provide feedback to the community.

- The <u>Regulation Checklist</u> provides a summary of FEMA's evaluation of whether the Plan has addressed all requirements.
- The <u>Plan Assessment</u> identifies the plan's strengths as well as documents areas for future improvement.
- The <u>Multi-jurisdiction Summary Sheet</u> is an optional worksheet that can be used to document how each jurisdiction met the requirements of each Element of the Plan (Planning Process; Hazard Identification and Risk Assessment; Mitigation Strategy; Plan Review, Evaluation, and Implementation; and Plan Adoption).

The FEMA Mitigation Planner must reference this *Local Mitigation Plan Review Guide* when completing the *Local Mitigation Plan Review Tool*.

Jurisdiction: Newburyport MA	Title of Plan: Nev Hazard Mitigatio	vburyport Multi— n Plan	Date of Plan: November 2022
Local Point of Contact: Julia Godtfro	edsen	Address: 60 pleas	ant street, Newburyport MA 01950
Title: Conservation Agent			
Agency: City of Newburyport			
Phone Number: 978-465-4400		E-Mail: jgodtfreds	en@cityofnewburyport.com

State Reviewer:	Title:	Date:

FEMA Reviewer:	Title:	Date:
Date Received in FEMA Region (insert #)		
Plan Not Approved		
Plan Approvable Pending Adoption		
Plan Approved		

SECTION 1: REGULATION CHECKLIST

INSTRUCTIONS: The Regulation Checklist must be completed by FEMA. The purpose of the Checklist is to identify the location of relevant or applicable content in the Plan by Element/sub-element and to determine if each requirement has been 'Met' or 'Not Met.' The 'Required Revisions' summary at the bottom of each Element must be completed by FEMA to provide a clear explanation of the revisions that are required for plan approval. Required revisions must be explained for each plan sub-element that is 'Not Met.' Sub-elements should be referenced in each summary by using the appropriate numbers (A1, B3, etc.), where applicable. Requirements for each Element and sub-element are described in detail in this *Plan Review Guide* in Section 4, Regulation Checklist.

1. REGULATION CHECKLIST	Location in Plan		Not
Regulation (44 CFR 201.6 Local Mitigation Plans)	(section and/or page number)	Met	Met
ELEMENT A. PLANNING PROCESS			
A1. Does the Plan document the planning process, including how it was prepared and who was involved in the process for each jurisdiction? (Requirement §201.6(c)(1))	Section 2, pp 13-24		
A2. Does the Plan document an opportunity for neighboring communities, local and regional agencies involved in hazard mitigation activities, agencies that have the authority to regulate development as well as other interests to be involved in the planning process? (Requirement §201.6(b)(2))	Section 2.3, pp 17- 19, p 31 regulatory authority for development		
A3. Does the Plan document how the public was involved in the planning process during the drafting stage? (Requirement §201.6(b)(1))	Section 2.3, pp 17- 19, section 2.5 pp 23-24		
A4. Does the Plan describe the review and incorporation of existing plans, studies, reports, and technical information? (Requirement §201.6(b)(3))	Section 2.1, 2.2, & 2.4, pp 13-17 & 20- 23		
A5. Is there discussion of how the community(ies) will continue public participation in the plan maintenance process? (Requirement §201.6(c)(4)(iii))	Section 2.6, p 24		
A6. Is there a description of the method and schedule for keeping the plan current (monitoring, evaluating and updating the mitigation plan within a 5-year cycle)? (Requirement $\$201.6(c)(4)(i)$)	Section 9.2, pp 146- 147		
ELEMENT A: REQUIRED REVISIONS			

1. REGULATION CHECKLIST	Location in Plan (section and/or		Not
Regulation (44 CFR 201.6 Local Mitigation Plans)	page number)	Met	Met
B1. Does the Plan include a description of the type, location, and extent of all natural hazards that can affect each jurisdiction(s)? (Requirement §201.6(c)(2)(i))	Section 4, pp 45-107		
B2. Does the Plan include information on previous occurrences of hazard events and on the probability of future hazard events for each jurisdiction? (Requirement §201.6(c)(2)(i))	Section 4, pp 45-107, Section 4B pp 108- 115		
B3. Is there a description of each identified hazard's impact on the community as well as an overall summary of the community's vulnerability for each jurisdiction? (Requirement §201.6(c)(2)(ii))	Section 4, pp 45-107, section 4B pp 108- 115		
B4. Does the Plan address NFIP insured structures within the jurisdiction that have been repetitively damaged by floods? (Requirement §201.6(c)(2)(ii)) ELEMENT B: REQUIRED REVISIONS	Section 4.1 & Table 4.1.2, p 52		
ELEMENT C. MITIGATION STRATEGY			
C1. Does the plan document each jurisdiction's existing authorities, policies, programs and resources and its ability to expand on and improve these existing policies and programs? (Requirement §201.6(c)(3))	Section 5 pp 122- 126, section 10 pp 149-150		
C2. Does the Plan address each jurisdiction's participation in the NFIP and continued compliance with NFIP requirements, as appropriate? (Requirement §201.6(c)(3)(ii))	Section 4.1 pp 49-52 & table 5.1 pp 123 (first row)		
C3. Does the Plan include goals to reduce/avoid long-term vulnerabilities to the identified hazards? (Requirement §201.6(c)(3)(i))	Section 7 pp 133-137		
C4. Does the Plan identify and analyze a comprehensive range of specific mitigation actions and projects for each jurisdiction being considered to reduce the effects of hazards, with emphasis on new and existing buildings and infractructure? (Requirement	Section 8 and table 8.1.1. pp 138-144		
C5. Does the Plan contain an action plan that describes how the actions identified will be prioritized (including cost benefit review), implemented, and administered by each jurisdiction? (Requirement	Section 8 pp 138-144		
C6. Does the Plan describe a process by which local governments will integrate the requirements of the mitigation plan into other planning mechanisms, such as comprehensive or capital improvement plans, when appropriate? (Requirement §201.6(c)(4)(ii))	Section 2 pp 13-16, Section 10 pp 148- 150, Section 7 p 133, Section 6 p 127		
ELEMENT C: REQUIRED REVISIONS			

1. REGULATION CHECKLIST Regulation (44 CFR 201.6 Local Mitigation Plans)	Location in Plan (section and/or page number)	(section and/or page number) Met				
ELEMENT D. PLAN REVIEW, EVALUATION, AND IMPLEMEN only)	TATION (applicable to	plan upd	ates			
D1. Was the plan revised to reflect changes in development? (Requirement §201.6(d)(3))	Section 3.7 pp 38-39 & section 7.4 p 137					
D2. Was the plan revised to reflect progress in local mitigation efforts? (Requirement §201.6(d)(3))	Section 6 pp 127-132					
D3. Was the plan revised to reflect changes in priorities? (Requirement §201.6(d)(3))	Section 8 pp 138-144					
ELEMENT E. PLAN ADOPTION						
E1. Does the Plan include documentation that the plan has been formally adopted by the governing body of the jurisdiction requesting approval? (Requirement §201.6(c)(5))	Unsigned adoption resolution on page 2					
E2. For multi-jurisdictional plans, has each jurisdiction requesting approval of the plan documented formal plan adoption? (Requirement §201.6(c)(5))	N/A					
ELEMENT E: REQUIRED REVISIONS						
ELEMENT F. ADDITIONAL STATE REQUIREMENTS (OPTION) NOT TO BE COMPLETED BY FEMA)	AL FOR STATE REVIE	WERS C	NLY;			
F1.						
F2.						
ELEMENT F: REQUIRED REVISIONS	1					

SECTION 2: PLAN ASSESSMENT

INSTRUCTIONS: The purpose of the Plan Assessment is to offer the local community more comprehensive feedback to the community on the quality and utility of the plan in a narrative format. The audience for the Plan Assessment is not only the plan developer/local community planner, but also elected officials, local departments and agencies, and others involved in implementing the Local Mitigation Plan. The Plan Assessment must be completed by FEMA. The Assessment is an opportunity for FEMA to provide feedback and information to the community on: 1) suggested improvements to the Plan; 2) specific sections in the Plan where the community has gone above and beyond minimum requirements; 3) recommendations for plan implementation; and 4) ongoing partnership(s) and information on other FEMA programs, specifically RiskMAP and Hazard Mitigation Assistance programs. The Plan Assessment is divided into two sections:

- 1. Plan Strengths and Opportunities for Improvement
- 2. Resources for Implementing Your Approved Plan

Plan Strengths and Opportunities for Improvement is organized according to the plan Elements listed in the Regulation Checklist. Each Element includes a series of italicized bulleted items that are suggested topics for consideration while evaluating plans, but it is not intended to be a comprehensive list. FEMA Mitigation Planners are not required to answer each bullet item, and should use them as a guide to paraphrase their own written assessment (2-3 sentences) of each Element.

The Plan Assessment must not reiterate the required revisions from the Regulation Checklist or be regulatory in nature, and should be open-ended and to provide the community with suggestions for improvements or recommended revisions. The recommended revisions are suggestions for improvement and are not required to be made for the Plan to meet Federal regulatory requirements. The italicized text should be deleted once FEMA has added comments regarding strengths of the plan and potential improvements for future plan revisions. It is recommended that the Plan Assessment be a short synopsis of the overall strengths and weaknesses of the Plan (no longer than two pages), rather than a complete recap section by section.

Resources for Implementing Your Approved Plan provides a place for FEMA to offer information, data sources and general suggestions on the overall plan implementation and maintenance process. Information on other possible sources of assistance including, but not limited to, existing publications, grant funding or training opportunities, can be provided. States may add state and local resources, if available.

A. Plan Strengths and Opportunities for Improvement

This section provides a discussion of the strengths of the plan document and identifies areas where these could be improved beyond minimum requirements.

Element A: Planning Process

How does the Plan go above and beyond minimum requirements to document the planning process with respect to:

- Involvement of stakeholders (elected officials/decision makers, plan implementers, business owners, academic institutions, utility companies, water/sanitation districts, etc.);
- Involvement of Planning, Emergency Management, Public Works Departments or other planning agencies (i.e., regional planning councils);
- Diverse methods of participation (meetings, surveys, online, etc.); and
- *Reflective of an open and inclusive public involvement process.*

Element B: Hazard Identification and Risk Assessment

In addition to the requirements listed in the Regulation Checklist, 44 CFR 201.6 Local Mitigation Plans identifies additional elements that should be included as part of a plan's risk assessment. The plan should describe vulnerability in terms of:

- 1) A general description of land uses and future development trends within the community so that mitigation options can be considered in future land use decisions;
- 2) The types and numbers of existing and future buildings, infrastructure, and critical facilities located in the identified hazard areas; and
- *3)* A description of potential dollar losses to vulnerable structures, and a description of the methodology used to prepare the estimate.

How does the Plan go above and beyond minimum requirements to document the Hazard Identification and Risk Assessment with respect to:

- Use of best available data (flood maps, HAZUS, flood studies) to describe significant hazards;
- Communication of risk on people, property, and infrastructure to the public (through tables, charts, maps, photos, etc.);
- Incorporation of techniques and methodologies to estimate dollar losses to vulnerable structures;
- Incorporation of Risk MAP products (i.e., depth grids, Flood Risk Report, Changes Since Last FIRM, Areas of Mitigation Interest, etc.); and
- Identification of any data gaps that can be filled as new data became available.

Element C: Mitigation Strategy

How does the Plan go above and beyond minimum requirements to document the Mitigation Strategy with respect to:

- Key problems identified in, and linkages to, the vulnerability assessment;
- Serving as a blueprint for reducing potential losses identified in the Hazard Identification and Risk Assessment;
- Plan content flow from the risk assessment (problem identification) to goal setting to mitigation action development;
- An understanding of mitigation principles (diversity of actions that include structural projects, preventative measures, outreach activities, property protection measures, post-disaster actions, etc);
- Specific mitigation actions for each participating jurisdictions that reflects their unique risks and capabilities;
- Integration of mitigation actions with existing local authorities, policies, programs, and resources; and
- Discussion of existing programs (including the NFIP), plans, and policies that could be used to implement mitigation, as well as document past projects.

Element D: Plan Update, Evaluation, and Implementation (*Plan Updates Only*)

How does the Plan go above and beyond minimum requirements to document the 5-year Evaluation and Implementation measures with respect to:

- Status of previously recommended mitigation actions;
- Identification of barriers or obstacles to successful implementation or completion of mitigation actions, along with possible solutions for overcoming risk;
- Documentation of annual reviews and committee involvement;
- Identification of a lead person to take ownership of, and champion the Plan;
- Reducing risks from natural hazards and serving as a guide for decisions makers as they commit resources to reducing the effects of natural hazards;
- An approach to evaluating future conditions (i.e. socio-economic, environmental, demographic, change in built environment etc.);
- Discussion of how changing conditions and opportunities could impact community resilience in the long term; and
- Discussion of how the mitigation goals and actions support the long-term community vision for increased resilience.

B. Resources for Implementing Your Approved Plan

Ideas may be offered on moving the mitigation plan forward and continuing the relationship with key mitigation stakeholders such as the following:

- What FEMA assistance (funding) programs are available (for example, Hazard Mitigation Assistance (HMA)) to the jurisdiction(s) to assist with implementing the mitigation actions?
- What other Federal programs (National Flood Insurance Program (NFIP), Community Rating System (CRS), Risk MAP, etc.) may provide assistance for mitigation activities?
- What publications, technical guidance or other resources are available to the jurisdiction(s) relevant to the identified mitigation actions?
- Are there upcoming trainings/workshops (Benefit-Cost Analysis (BCA), HMA, etc.) to assist the jurisdictions(s)?
- What mitigation actions can be funded by other Federal agencies (for example, U.S.
 Forest Service, National Oceanic and Atmospheric Administration (NOAA),
 Environmental Protection Agency (EPA) Smart Growth, Housing and Urban Development
 (HUD) Sustainable Communities, etc.) and/or state and local agencies?

SECTION 3: MULTI-JURISDICTION SUMMARY SHEET (OPTIONAL)

INSTRUCTIONS: For multi-jurisdictional plans, a Multi-jurisdiction Summary Spreadsheet may be completed by listing each participating jurisdiction, which required Elements for each jurisdiction were 'Met' or 'Not Met,' and when the adoption resolutions were received. This Summary Sheet does not imply that a mini-plan be developed for each jurisdiction; it should be used as an optional worksheet to ensure that each jurisdiction participating in the Plan has been documented and has met the requirements for those Elements (A through E).

	MULTI JURISDICTION SUMMARY SHEET											
		Jurisdiction					A.	В.	Requiremen C.	ts Met (Y/N) D.	E.	F.
#	Jurisdiction Name	Type (city/borough/ township/ village, etc.)	Plan POC	Mailing Address	Email	Phone	A. Planning Process	ь. Hazard Identification & Risk Assessment	C. Mitigation Strategy	D. Plan Review, Evaluation & Implementation	E. Plan Adoption	r. State Require- ments
1												
2												
3												
4												
5												
6												
7												
8												
9												

					MULT	JURISDICTI		ARY SHEET				
#	Jurisdiction Name	Jurisdiction Type (city/borough/ township/ village, etc.)	Plan POC	Mailing Address	Email	Phone	A. Planning Process	B. Hazard Identification & Risk Assessment	Requiremen C. Mitigation Strategy	ts Met (Y/N) D. Plan Review, Evaluation & Implementation	E. Plan Adoption	F. State Require- ments
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												

CITY OF NEWBURYPORT

IN CITY COUNCIL



ORDERED:

January 30, 2023

Administrative Order

WHEREAS, Article 5, Administrative Organization, Section 5-1, Organization of City Agencies, of the Newburyport Home Rule Charter authorizes the Mayor to reorganize, consolidate or abolish any City agency, in whole or in part, or to establish such new City agencies as is deemed necessary; and

WHEREAS the Mayor intends to establish an operating division with respect to the operation of the City's parks for the efficient conduct of the business of the City and further improve the services provided by the City's administration; and

WHEREAS the Mayor has included a message with the plan attached hereto and marked Attachment 'A' to the Council explaining the benefits expected to result from this proposed change and the sections of existing ordinances that will need to be amended.

NOW, THEREFORE, the City Council hereby approves the reorganization of the Newburyport Parks Department as described in the attached plan, and its primary responsibilities will be placed under the auspices of the Department of Public Services. Further, additional responsibilities of the Parks Department will be brought into Newburyport Youth Services, the Department of Planning and Development, the Mayor's Office, and the Parks Commission. Any needed amendments to the City's Code of Ordinances will be brought to the City Council for consideration to effectuate this Order and Attached Plan with respect to reorganization of the Parks Department. This administrative order will come into effect in 60 days, unless disapproved by a vote of the Council.

Councillor Heather L. Shand



Courtesy Bob Watts

NEWBURYPORT PARKS REORGANIZATION PLAN

January 24, 2023

Full Plan to the City Council Accompanying Administrative Order

Mayor Sean R. Reardon City of Newburyport



CITY OF NEWBURYPORT Office of the Mayor Sean R. Reardon, Mayor

"A"

60 Pleasant Street - P.O. Box 550 Newburyport, MA 01950 978-465-4413 phone mayor@cityofnewburyport.com

January 24, 2023

President Shand and Members of the Newburyport City Council,

It has been five months since I first introduced my reorganizational plan for Newburyport's parks and playgrounds. I continue to be excited about this plan, and believe it is the best move for our City.

Our parks represent some of our most valuable public assets, and we owe it to them, and to our residents, to protect and enhance them for future generations to enjoy. Our parks provide a necessary connection to nature, history, community and recreation, and support our economic and environmental sustainability. I remain steadfast in my belief that this plan will provide our parks with the highest level of care in the most efficient and effective manner.

Since this plan was first introduced in August, we heard from each member of the City Council, we have held two public forums, and we have adopted many good suggestions for adjustments to the plan. In September, we elected to withdraw the plan to hold focused public discussions with the Parks Commission, which, subject to appropriation, lays out, regulates, and hires officers to manage our parks.

The Parks Commission has discussed, and is currently drafting, a 10-year vision for our parks. In parallel, a passionate group of residents has also stepped up to create a new 501(c)(3), the Port Parks Alliance, to be the fundraising and volunteer support arm for our parks. Based upon the good work of the Commission and Alliance over the past three months, we have made additional adjustments to the plan to reflect and support the priorities and desires of each group.

It is through open dialogue and collaboration that successful outcomes occur. The adjustments to the reorganization plan that you will find in the following pages represent just such an effort over the past five months. Those efforts have made this plan stronger.

The plan touches many city departments, not just the Parks Department, all of which have been involved in crafting the revisions. The result weaves together existing strengths to address the City's needs, culminating in what I know will be a stronger organizational plan to support our parks, and our City, moving forward. I look forward to discussing this with you and the public in the coming weeks.

Respectfully,

In Meardon

Mayor Sean R. Reardon

Executive Summary

In August of 2022, this Administration brought forth a plan to reorganize Newburyport's Parks Department into the Department of Public Services. The goal of the reorganization was, and continues to be, to strengthen Newburyport's Parks, improve efficiencies, and eliminate redundancies. While many members of the City Council and the public approved of this plan in concept, there were questions that arose around the elimination of the Parks Director position, and how to support the number of perceived roles that position filled. Instead of thinking about the Parks Director's role as being split across multiple departments, the following pages show how the Reorganization Plan is instead better aligning the skill sets that currently exist within the City in order to support the needs of our parks, in a way that will continue to make our parks better.

Below is a list of changes that the Reorganization Plan proposes:

- 1. Move the operations of the current Parks Department under the Department of Public Services and remove the Parks Director position to **improve maintenance and better allocate resources**:
 - Maintain all other people and positions previously in the Parks Department, including the Parks Manager, full-time and part-time employees, who have specific skills and experience related to our Parks, as a fully intact Division under DPS. They will continue to execute operations, inspections and maintenance as they have in the past, but will report to DPS leadership rather than to a Parks Director.
 - Utilize the Business Manager role within DPS to provide procurement, contract management and budgeting assistance, which are skills this role is expert in.
 - Employ DPS Admin to execute work orders, write agendas and minutes for the Parks
 Commission, and manage pro forma permits and reservations for the parks.
- 2. Bring Adult Recreation under supervision of NYS to improve allocation of resources:
 - Continue to offer adult recreation opportunities under the purview of NYS, which has both capacity and platforms in place to support such activities.
- Advance advocacy and fundraising for our parks to improve governance and better allocate resources:
 - Work with the new 501(c)(3) Port Parks Alliance, whose mission is to support advocacy, fundraising and volunteerism in our parks.

- Coordinate communication between the Port Parks Alliance, the Parks Commission and Parks Manager to support initiatives and priorities as identified by the Commission, and to comply with all Charter, Newburyport Code, and state laws on accepting gifts.
- 4. Provide additional support for parks and open space within the Planning Office by having the Department's Planner assist the Parks Commission with specific tasks to support visioning and implementing of parks specific plans:
 - Support some project management, and staffing of the Parks Commission to help coordinate the implementation of the City's Master Plan, Open Space and Recreation Plan, and the Parks Commission's 10-year Strategic Plan.
- Provide the Parks Commission with additional support from the Mayor's Office and Planning Office to improve governance:
 - Assist the Commission in setting and adopting policies that reduce their time reviewing issues and permits ad hoc.
 - Increase the Commission's ability to spend time focusing on their goals, core values and opportunities including annual, scheduled reviews of the Parks Master Plan of priority projects, grant and fundraising requests, policy reviews, review of the City's 'Orphaned Properties', and improved communication with the public about park assets.

Newburyport's 2020 Open Space and Recreational plan included a community survey in which residents and stakeholders were very clear about why they choose to live in Newburyport: because of its natural beauty, historic and cultural assets, and open space and recreation opportunities. That strong sense of civic pride rang true last fall as we discussed the first version of this parks reorganization plan, and that pride of place and importance of our open spaces carry though every line of this reorganization plan. This plan makes our parks stronger and provides the support needed to maintain and improve them for years to come.

Goal of Restructuring

One of the main objectives in the Mayor's Strategic Plan is to provide high-quality public services in order to strengthen our city's position as a desirable place to live, work, and visit. A subset of this goal is a commitment to maintain the City's excellent financial position and to look for new ways to maximize efficiencies in its administration. The City administration constantly looks for ways to improve municipal administration and provide the high level of services our residents expect, by efficiently using existing City resources. The City Council is particularly interested in reducing unnecessary spending so that residents can be spared from high tax increases.

In August 2022, Mayor Reardon proposed a plan to consolidate the Parks Department within the Department of Public Services, which originated as a recommendation from municipal management consultant Community Paradigm in their June 2022 report on operational improvements. The report reads in pertinent part as follows:

"Issue: The Parks Department maintenance crew consists of two (2) full-time individuals and seasonal staffing, when available. The crew is responsible for maintaining a number of park areas throughout the City. With very limited staff, accomplishing all its workload proves problematic at times. The Department of Public Services (DPS) has a much larger staff that performs many of the same tasks also throughout the City. As an example, in certain areas park maintenance staff is responsible for one side of the street while DPS is responsible for the opposite side.

Recommendation: Establish a Parks Division within DPS with responsibilities related to public parks and grounds. The two full-time park maintenance staff would be merged into existing DPS structure and utilized as other department personnel. This will eliminate duplication of tasks and responsibilities, as well as the purchase and maintenance of capital equipment. The larger DPS staff would be able to accomplish all necessary park maintenance tasks with the ability to provide coverage during vacations, sick leave, etc. Assign the current Parks Manager as a General Foreman or a Division Head in DPS reporting to the DPS Assistant Director (similar to the already current General Foreman). This individual could be responsible for several DPS responsibilities that perform like services that he currently oversees." This recommendation remains timely and relevant, because the opportunities for efficiencies presented by consolidating the Parks Department remain. In later sections of the plan, we will detail how consolidation is also consistent with the City's Master Plan, Open Space Plan, and the goals of the Parks Commission, the body actually responsible for our system of parks and playgrounds.

Reorganization Plan: Process

This plan accompanies an administrative order submitted to the City Council to move the responsibilities of the Parks Department primarily to the Department of Public Services. Article 5, Section 5-1 of the Newburyport City Charter, titled "Organization of city agencies," requires that the Mayor file such an administrative order with the City Council to organize the City's operating agencies:

"The mayor may, subject only to express prohibitions in a general law or this charter, propose to reorganize, consolidate or abolish any city agency, in whole or in part, or to establish such new city agencies as is deemed necessary, but no function assigned by this charter to a particular city agency may be discontinued or assigned to any other city agency unless this charter specifically so provides. The mayor may from time to time prepare and submit to the city council administrative orders that establish operating divisions for the orderly, efficient or convenient conduct of the business of the city. These administrative orders shall be accompanied by a message of the mayor which explains the benefits expected to ensue and advises the city council if any provision of an administrative order shall require amendments, insertions, revisions, repeal or otherwise of existing ordinances."

This plan expands upon the earlier effort begun in August 2022. The plan presents a comprehensive approach to realizing a long-term vision for Newburyport's parks. It describes the benefits expected from the new operations plan (including additional supports for parks management), officers and groups proposed to be responsible for fundraising and events for our parks, and how municipal recreational activities will be structured.

It also includes information about how to support the Parks Commission in that body's role in overseeing our parks. This information includes an overview of those provisions of the Newburyport Code that may need to be updated to accompany the reorganization. Please refer to the matrix of responsibilities (Exhibit A) and the revised organization chart (Exhibit B).

History of Parks Commission and Department

The Parks Commission was established in 1996 under then-Mayor Lisa Mead. The exact responsibilities of the Commission have evolved over the last 25 years, but its mission to oversee the operation of the City's parks and recreational facilities has remained the same. Today, the Commission has jurisdiction over laying out parks, park improvements, and setting the rules of how parks are to be used, including the issuance of permits (Newburyport Code of Ordinances, Chapter 11). The five volunteer commissioners help to set the City's vision of how our parks will continue to meet the needs of our residents, including how they can be maintained for generations to come.

The Parks Department grew organically out of the Commission's work, and the need to have staff maintain and program our parks.

- The FY2015 Budget was the first to refer not merely to the Parks Commission, but to a "Parks Department," as well. However, no administrative order was submitted or considered, although Newburyport's Home Rule Charter had taken effect.
- Under the FY2015 Budget, both the Parks Commission and Parks Department were grouped under the broad category of "planning and development". This was the same year that the "Parks Coordinator" position was budgeted as a full-time position. Under the FY2016 Budget, the coordinator position was denoted as a "Director-" level job. The City Council appropriated the necessary funds, but did not approve an administrative order at that time.
- The FY2017 Budget classified the "Parks Department" as falling under the broad category of "public services", with the Parks Director being appointed by and reporting directly to the Mayor.
- The FY2018 Budget again placed the Parks Department within the broad planning and development category, which is how it has been listed since.
- The Department continued to grow after FY2016, with the addition of a "Parks Manager" in FY2018, an additional full-time laborer in FY2019 and another in FY2020.

Today, the Parks Department is budgeted for 7.5 FTE positions between the Parks Director, Parks Manager, two full time groundskeepers, 1 FTE in part-time groundskeepers, and 2.5 FTEs worth of seasonal groundskeepers. In contrast, under the FY2014 Budget, the sole employee was a Parks Coordinator, at 0.57-time, and no employee benefits. To that date, groundskeeping, for example, was handled by Department of Public Services staff.

Neither the Parks Department nor the Parks Commission is mentioned under the Newburyport Home Rule Charter. While the Parks Department appears to have evolved over time into a full "department", with a director reporting to the Mayor, there is no record of any plan for the Department's organization having been submitted to the City Council, at any point.

Review of Other Municipalities

With their June 2018 report, Community Paradigm submitted a review of other municipalities of similar sizes, identifying the structures of their parks, recreation, and public works agencies. Their findings confirmed research by the Mayor's Office, that it is common in municipalities at Newburyport's size and scale to manage its parks through their departments of public works. Community Paradigm has worked with municipalities of all sizes in Massachusetts and their recommendation carries considerable weight based on their experience in local government.

The following chart describes how comparable municipalities handle their parks.

Municipality	City/ Town	Population	Parks acres per 1000 people	Parks Maintenance	Recreation Programming	Commissions
Concord	Town	18,950	38	Public Works	Recreation Department	Recreation Commission
Scituate	Town	18,839	53.1	Public Works	Recreation Department	Recreation Commission
Sharon	Town	18,666	76.1	Public Works	Recreation Department	Recreation Advisory Committee
Winthrop	Town	18,558	1.7	Public Works	Parks and Recreation	Parks Committee
Pembroke	Town	18,455	40	Public Works	Recreation Department	Recreation Commission
Newburyport	City	18,197	11.8	Parks Department	Parks Department	Parks Commission
Rockland	Town	18,010	4.2	Park Department	Recreation Commission	Park Department
Foxborough	Town	17,917	41	Highway Division	Recreation Department	Recreation Board

Ashland	Town	17,787	51.6	Public Works	Recreation Department	Open Space and Recreation Committee
South Hadley	Town	17,715	19.8	Public Works	Recreation Department	Recreation Commission
Amesbury	City	17,474	44.4	Public Works	Recreation Department	Parks and Recreation Commission
Greenfield	City	17,353	12.4	Public Works	Parks and Recreation	Recreation Commission
					Parks and	Public Service
Gardner	City	20,607	99.4	Public Works	Recreation	Committee
				Public	Parks and	Parks and Recreation
North Adams	City	12,897	8.6	Services	Recreation	Commission

There are certainly some municipalities with standalone parks departments, but this appears to be more common only in larger and more populous places than Newburyport. The proposed structure here is consistent with that of other similarly situated municipalities and will best serve the City of Newburyport given our size, scale, and structure.

Proposed Structure

Operations

Under this reorganizational plan, operational and maintenance duties will be placed under the supervision of the Department of Public Services. The Parks Manager will report directly to the DPS leadership, with daily supervision from both the Director and Assistant Director of Public Services, based on their priorities and availability.

The duties of the Parks Manager will largely stay the same. They will oversee all parks operations and maintenance on a day-to-day basis, and the Administration will have this position moved into the appropriate union. The two full-time groundskeepers will continue to report to this employee, as will the part-time and seasonal workers. As a unit—the Parks Manager, groundskeepers, and part-time and seasonal workers—will be responsible for all physical work, maintenance and inspections at our parks. The difference is that the unit's budget and supervision will fall under DPS.

Moving into the Department of Public Services means the parks unit will have access to all of DPS's support staff, none of which are available to them today. This DPS Business Manager will assist with

procurement, budgeting, and contract management so that Parks staff will not be solely responsible for writing their own RFPs or managing contracts in addition to their field duties.

Currently, the parks unit has no administrative staff, while folding them under DPS will allow them to draw upon the three full-time administrative staff members at DPS. DPS administrative staff will be able to file work orders for the Parks unit and answer questions from the public. Perhaps most importantly, there will now be multiple administrative staff able to handle permit applications for Parks use. They will be trained on the parks permitting system and the protocol for referring permit applications to the Parks Commission as necessary. By statute the Parks Commission is the permitting authority for our parks and playgrounds, and the commission may delegate permitting to City officers or other staff as defined by them. (Munic. Code s. 11-5(t).)

Fulfilling the Previous Responsibilities of the Parks Director

A significant change within this structure is the elimination of the Parks Director position. A full accounting of the reassignment of the Department's responsibilities, including those of the Director, can be found in Exhibit A, the Responsibility Matrix. All responsibilities around day-to-day operations will be moved to the Department of Public Services as described in the section above. The August 2022 process included numerous discussions on the other responsibilities of the Parks Director, including advocacy and vision for the parks, supervision of programming and events, and supporting the Parks Commission. This section will describe the Administration's plan for transferring these responsibilities to individuals, departments, and organizations that are well equipped to fulfill them.

Strategic Planning and Vision

By statute, responsibility for the improvement and use of Newburyport's parks and playgrounds rests with our Parks Commission, with input from residents, and subject to appropriation. The City has a dedicated, thoughtful, and talented group of residents who serve on our Parks Commission. This reorganization plan is an opportunity to better align operational practice with the Commission's role as the vision definers and policy makers of our parks.

Over the last three months, the Parks Commission has undertaken a strategic planning process to identify their goals and core values, and opportunities for improving their policies and procedures as a Commission.

The Commission is proposing to undertake annual, scheduled reviews of its policies and to adopt rules for handling grant and fundraising requests. It also plans to adopt a capital plan for priority projects proposes the performance of an annual review, in collaboration with the Planning Department, Mayor's Office, and other pertinent Boards, Commissions and Departments, of the City's 'orphaned properties' to determine their suitability as parks or playgrounds. All of this policy work will focus Commission meeting time on its larger vision, rather than reviewing and voting on projects and permit applications ad hoc.

In the coming months, the Mayor's Office will help the Parks Commission to overhaul its website, to improve public communication around its adopted policies, regulations, and fee schedule, and to provide a map and inventory of assets at each of our City parks and playgrounds.

Project Management and Supporting the Parks Commission

Through the earlier rounds of feedback from the City Council and the public, concern was raised about whether the City has the capacity to support the planning and coordination needed to implement the vision for Newburyport's parks. There was also a preference expressed to employ a City staffer who has "subject matter" experience that is not strictly administrative. Accordingly, under this plan we propose having the Planning Department's Staff Planner add specific, parks related responsibilities to their portfolio. This position already staffs relevant committees, including the Community Preservation Committee, and would be comfortable playing a planning specific supporting role for the Commission. The Planner would be responsible for staffing the Parks Commission and coordinating the implementation of the City's Master Plan, Open Space and Recreation Plan, and Parks Commission Strategic Plan.

The Parks Commission has significant responsibilities, and this position will add staff support for implementing the plans they create. They will also help to staff planning processes, like the Open Space Plan. This position is already charged with assisting in land use decisions and coordinating the improvement of public and private lands, so this will be a natural fit.

Administration and Customer Service

To reiterate, the Administration intends for administrative staff already employed at the Department of Public Services to assist in the day-to-day use of our parks and playgrounds, mostly by handling permit applications and creating work orders for maintenance requests. One of these DPS administrative staffers will be made available for clerical support of the Parks Commission, including preparing agendas and writing minutes. This is, in fact, how clerical tasks are handled for our Water and Sewer Commission. Clerical support for Water and Sewer is, of course, far more intense than what the Parks Commission will need.

Adult Recreation

The Administration is committed to continuing to offer recreational programs for residents of all ages, and recommends bringing adult recreation under the direction of Newburyport Youth Services. Given its core competencies, NYS was mentioned in the Community Paradigm report as a logical home for some of the programmatic functions in our parks.

This plan proposes to move adult recreation programs under the purview of the NYS Associate Director of Recreation and we will have all recreation activities listed on the City's online activity registration portal. We anticipate providing the same level of service for recreation by assigning it to the purview of a position already working on recreation and using existing platforms for marketing and facilitating registration for these programs.

Advocacy, Fundraising, and Volunteering

In the past, the person serving as Parks Director has committed significant time to securing revenues for the preservation and expansion of our parks and playgrounds, through a non-City entity called the Parks Conservancy, that is controlled by the Mayor Gayden W. Morrill Foundation. The City is committed to maintaining its strong relationship with the Morrill Foundation, which historically has gifted approximately \$110,000 per year to advance priority capital projects in the City. Naturally, the City is very grateful to the Morrill family for its continued support of the City and its parks, in the tradition of Mayor Morrill himself, during the Great Depression.

While the Conservancy for many years handled donations paid to our parks and playgrounds, it had been managed by the former Parks Director, a City employee, on behalf of the Morrill Foundation. Late last year, the Foundation indicated a preference to dissolve the Conservancy in order to allow a new, independent, non-profit "Friends-type" group to emerge and help our parks and playgrounds, rather than handle monies directly. This transition presents an opportunity to ensure that all fundraising procedures avoid any legal or accounting issues that arise from mixing public and private functions, duties, and funds. To continue a tradition as old as our city government, the Administration would like to encourage private fundraising for and volunteer work at our parks and playgrounds. We are excited to announce the formation of a new 501(c)(3), called the Port Parks Alliance, whose charge is to advocate for our parks system, raise capital funding for the system, and organize volunteer labor. This group is purely volunteer and will have a close relationship with the Parks Commission.

When the Alliance raises money, it will be for those initiatives that the Commission has identified as its priorities, and all gifts above \$500 will be brought before the City Council for acceptance. By operating as a fully independent non-profit organization, we will be assured that the Alliance will comply with all local and state laws on accepting gifts, and will provide transparency in the handling of public funds.

The Alliance can be a vehicle for some donor-directed spending, but by working through the Parks Commission, the City can be sure that these opportunities are consistent with the City's own goals, as well as the capacity of staff to implement. Going forward, donors to the Alliance will be able to see in public filings, accessible through the City website, how funds are actually spent on parks projects.

The Port Parks Alliance will also be responsible for organizing volunteer workers at our parks and playgrounds. The Alliance will work with the Parks Commission and City staff as directed by that commission, to organize annual clean-up and advocacy events. Further events could also be authorized by the Parks Commission, depending on their match with that commission's strategic plans and priorities. The City is grateful to its residents who care deeply about the City's parks, and the Alliance will be able to organize volunteers systematically and transparently.

Grant Writing

The City employs a part-time grant writer, who will remain the point person for writing grants to support the City's parks.

<u>Summary</u>

Further details on the proposed reorganization can be found in Exhibit A, the proposed responsibilities matrix. Between the administrative, management, and business offices at DPS, the policy and planning assistance from the Planning Department and Parks Commission, and recreation services through NYS, most non-maintenance functions will be covered by departments already engaged in similar work.

Anticipated Benefits

Operational Efficiencies: The greatest benefits of this reorganization plan include a new ability to achieve greater outputs with fewer or similar resources, and the improvement of processes that will lead to high quality parks maintenance, efficient delivery of capital projects, and an improved resident experience with their city parks and playgrounds.

DPS and Parks Department staff have been performing similar functions without coordination, often entering into multiple contracts to buy the same supplies, or purchasing the same equipment, which may not receive full use in either department. The two departments have identified specific areas of efficiencies, as follows:

- <u>Administrative Staff</u>: As described earlier, shared administrative staff will allow for more efficient communication with the public and the immediate creation of work orders to address resident issues. Parks maintenance staff will be able to focus on improving the condition of the parks and playgrounds.
- <u>Snowplowing:</u> Currently, Parks staff snowplow parks and playgrounds only, and they begin that work while DPS staff are still plowing city streets and sidewalks, without any coordination. Merging with DPS will allow staff in the Parks unit to plow alongside DPS staff, as needed given actual conditions. For example, new cooperation will mean that heavily used parks and playgrounds like the Clipper City Rail Trail can be cleared as quickly as possible by parks unit and DPS staff, together. The Department of Public Services files an annual snow removal plan with the City Council, as required under the Newburyport Code, and these changes will be addressed through that document.

Further, pooling equipment creates redundancies so that if one piece becomes inoperable, there are backups. For example, this past winter the Parks Kubota tractor used by parks staff became disabled six hours before a major snow storm, and needed attention and resources under intense time constraints to fix. DPS equipment could not be used to help. In practical terms, merging with DPS means that parks staff will be able to mount plows on two additional trucks. Also, parks staff will gain new access to DPS trucks or staff to plow parks parking lots to that serve our parks and playgrounds, which is not true today.

- <u>Other Equipment:</u> This advantage is also felt through saved capital and maintenance costs, but streamlining even just the logistics of purchase and use of equipment shared by both parks staff and DPS will help both. Examples include landscape equipment (mowers, trimmers, etc.) as well as attachments or modifications to existing equipment. These changes will be reflected in future Capital Improvement Plans, showing both potential reductions in overlapping equipment and more targeted requests that will better our parks and playgrounds.
- <u>Operational Systems</u>: The Department of Public Services utilizes a number of systems and apps that allow for faster assignment and tracking of work. They also have the full support of their business office which handles payroll, accounts payable, purchasing, vendor selection, and ordering of supplies. Meanwhile, today's Parks Department does not have any work order system for assigning tasks. Giving parks staff access to DPS's systems ad apps will allow a level of management and tracking that does not and cannot otherwise exist. To better communicate with residents and Ward Councillors, requests related to parks and playgrounds will be able to be indexed, prioritized, and tracked.
- <u>Physical Condition of Parks and Playgrounds</u>: The merger will lead to a higher level of physical care at our parks and playgrounds. Specifically, we will see higher frequency mowing, faster service on irrigation systems (which requires coordination with the Water Department, also part of DPS), more frequent repainting of benches, and faster repair of water fountains and play equipment.

<u>Cost Savings</u>: While Operational Improvements are the focus of this plan, cost savings are anticipated because of the elimination of the Director's position, which will put total cost savings at around \$105,000 per year. We have also addressed how revenue creation activities regarding the parks, including grant writing and fundraising, will be covered by volunteer organizations or current employees.

DPS and Parks have identified several areas for cost savings derived from operational efficiencies, which are detailed below.

- Equipment Rental: Currently, parks staff must rent equipment for annual maintenance and to complete larger capital projects. For example, Parks often subcontracts to use trucks at a cost of over \$361.00 per day, and usually for a period of two weeks, even though DPS may have trucks available. Parks also currently contracts with private companies to clear out rock, aggregate, or debris from assorted landscape projects, but will no longer have to do so when given access to DPS's Fulton Pit, as well as DPS vehicles for hauling. Other common rentals by Parks include skid steers, loaders, and mini excavators, all of which will now be able from DPS's pool of equipment. Savings on annual maintenance is estimated at least \$800 a year, and can bring down costs of individual projects by 5-10% depending on the project. Between maintenance and projects, savings are anticipated at approximately \$3,000 a year, which may seem modest but is significant over the lifetime of our parks system.
- <u>Purchasing of Materials</u>: The City will see savings with Parks purchases now being integrated into bulk orders through DPS for items such as salt, ice melt, fertilizer, seed, and mulch. Savings are estimated at up to 10%, which on today's approximate \$41,000 budget, will save approximately \$4,000 every year.
- <u>Contracted Services</u>: Parks has two vehicles that are currently serviced by the dealer. Once the reorganization within DPS is complete, in-house DPS mechanics will be able to service these vehicles instead, saving approximately \$250 an hour for any work done. Vehicles typically receive an average of four hours of service per year. Having service in-house also means they can be fixed and placed back into service faster, and it will be less expensive to provide routine service more often, which can help extend the life of the vehicles. Cash savings for such vehicle maintenance is estimated at approximately \$2,000 per year.
- <u>Bookkeeping Services</u>: Today's Parks Department pays a part-time bookkeeper \$3,000 every year, and this work will instead be completed by the in-house DPS business office staff.
- <u>Operational Cost Savings</u>: Costs are expected to decrease and staff time is expected to be used more efficiently because of the operational improvements described in this and the previous section. The Parks Manager will not need to spend time on renting equipment or checking in on task completion because of the improvements in staffing, operations, and equipment sharing.

Costs could decrease by as much as 20% thanks to these improvements, and would make certain projects more feasible and efficient.

• <u>Existing DPS Contracts</u>: Leveraging existing DPS contracts for certain capital and maintenance tasks, including paving, sidewalks/walkways, tree removal and more will also create substantial savings. These may be expected on a per-project basis. For example, completion of the Joppa Park walkway project cost approximately \$30,000 less than budgeted by utilizing DPS's sidewalk contractor, and leveraging their economies of scale.

Needed Changes in the Code of Ordinances

The Charter at Section 5-1 states that the Mayor's message should advise the City Council if there will be a need to update or amend the City's Code of Ordinances. Potential updated Ordinances may include, but not be limited to, the sections found below.

Chapter 2, Article VI, Section 2-394 – Departmental Revolving Funds

This section gives the Parks Director the authority to spend from the Parks Maintenance Revolving Fund. We will recommend that this responsibility instead be given to the Director of Public Services. The funds will still be used for the same purpose, which is maintaining the parks and investing in repairs, renovations, upkeep and security. The source of the funds are fees and charges received from renting the parks. The funds would with approval by the DPS Director (with reporting to the Commission and City Council), allowing for more immediate spending with appropriate oversight, and can serve the immediate needs of the City's parks. The original language is found below.

A Revolving fund	B Department, Board, Committee, Agency or Officer Authorized to Spend from Fund	C Fees, Charges or Other Receipts Credited to Fund	D Program or Activity Expenses Payable from Fund	E Fiscal Years
Parks maintenance	Parks Director	Fees and charges paid to the city for the use	Expenses associated with parks	Fiscal year 2019 and

and rental of parks by outside groups, organizations and	maintenance, repairs, renovations,	subsequent years
individuals	upkeep and security	

Chapter 11, Article I, Section 11-5(t, v, and y) – Rules and Regulations for All Public Playgrounds:

Chapter 11 will need to be edited in a few places. Currently, Chapter 11 allows the Parks Commission to delegate authority in approving routine, non-recurring park permits to the Parks Director. We will recommend that these provisions be changed to instead allow for the Parks Commission to use different designees to process such applications. As addressed above, our recommendation is for the DPS Administrative Assistant, who will staff the Parks Commission, to approve routine applications, and to bring complicated applications to the Commission for further consideration. We also recommend removing the phrase "non-recurring" from the section, to more adequately reflect how applications were being processed by the Parks Director. It is our recommendation that the Parks Commission set a formal policy for which applications are considered routine and non-recurring, and so can be handled by administrative staff, with all the rest handled by the Commission.

The specific provisions of Chapter 11 to consider are found below.

- "The parks commission shall be the permitting authority for all of the city's public parks and playgrounds, and applications for activities therein shall be made to such commission. Solely for routine, non-recurring applications, the parks commission may delegate its authority to process such applications to the parks director, by promulgating a rule pursuant to section 11-6."
- "Permit applications for activities at parks and playgrounds, made pursuant to the rules and regulations of this chapter 11, shall be processed in the order of their receipt. The parks commission, or the parks director as its designee pursuant to subsection (t), shall determine whether to grant or deny an application within thirty (30) days of receipt of determining that such application is complete, in all respects, unless the applicant provides written consent to extend such period for a set period."
- *"Denial of an application for authorization shall be in writing, and shall set forth clearly the grounds upon which the permit was denied. Where feasible, the parks commission, or the parks*

director as its designee pursuant to subsection (u), shall suggest in such written denial those measures by which the applicant may cure any defects in its permit application, or otherwise procure a permit in a subsequent application."

Additional Changes

Creating an additional division within the Department of Public Services will also require reevaluating the Department's allocation of overhead costs to its divisions, which has implications for the budgets of the General Fund, Water Enterprise Fund, and Sewer Enterprise Fund. The Finance Department and Business Manager of the DPS will work together on allocating these in the 2024 Budget Cycle based on preliminary time estimates after the plan is approved. The DPS Director and Finance Director currently recommend adopting the following splits between divisions:

Staff Position	Highway Division (GF)	Parks Division (GF)	Water Division (Water Enterprise Fund)	Sewer Division (Sewer Enterprise Fund)
Management Positions (Director, Deputy Director, Business Manager)	30%	10%	30%	30%
Engineering	33%	1%	33%	33%
Administrative Staff (Overall Split)	25%	10%	35%	30%
Facilities	97%	1%	1%	1%
Electrician	64%	4%	16%	16%

This will continue to be revised in a way that accurately estimates the time spent by relevant staff on division related activities.

Fit with Other City Plans

At the outset of this plan, we addressed how it serves the goals of the City's Master Plan, which was adopted in 2017 after a large-scale, community-led processes. The plan is also consistent with the City's Open Space and Recreation Plan, adopted in 2020. Finally, we have mentioned that the commission in recent months began a 10-year strategic visioning process, which the reorganization plan also services. Below are more details.

Support for the City's Master Plan (2017):

Newburyport is fortunate to have 26 city parks and playgrounds. Together, they comprise over 200 acres, or roughly 3% of the City's total land, including parks of historical significance, woodlands, water features, over three miles of rail trails, playing fields, courts, and play areas. There is no question that these resources are a source of great community pride, as they help make the City an extremely desirable place to live, work and visit.

Within Chapter 9 of the City's Master Plan (Cultural, Historical & Heritage Resources), is an overall theme of strengthening, enhancing, and promoting the City's many cultural, historical and natural heritage resources for residents and visitors to enjoy. By utilizing the existing strengths and resources that already exist throughout the City in a more effective and organized way, the Parks Reorganization Plan will provide the appropriate supports to execute on the goals as detailed below.

Goal CR-3: Support a rich variety of cultural opportunities and activities for all groups and individuals in the City.

Detail: Over the past few months, a committed group of residents has formed a new non-profit Port Parks Alliance, whose purpose is to advocate for our parks and provide support in terms of fundraising and volunteerism. Early discussions with this group have included the potential for one or more annual landmark events to raise awareness and money to support capital improvements in our parks, as identified by the Parks Commission, and regular coordination with parks volunteers who desire to connect with our parks in a purposeful way. They also aim to promote education and advocacy for our City's open spaces in terms of their history, ecological vibrancy and overall maintenance.

Goal CR-4: Promote the preservation, appreciation, and sustainable use of Newburyport's natural resources for residents and visitors.

Detail: Over the past few months, the Parks Commission has embarked on a 10-year Strategic Visioning Plan to identify the core values of the Commission, and drive their priorities over the next decade. Among the 6 core values the Commission has identified is 'Environmental Conservation', which includes a desire to coordinate with City agencies to improve climate resiliency at our most vulnerable parks, identifying plant species that are well-suited to climate change, reducing water needs, and considering renewable energy sources within our parks. The Parks Commission will be working with the Parks Manager and Mayor's office to set policies around these critical issues, and schedule regular coordination meetings with appropriate City agencies in order to move some of these key priorities.

Goal CR-5: Promote and support an increased level of preservation to protect Newburyport's historic built environment for future generations.

Detail: Included in the Parks Commission's core value 'Historic Preservation', is the aim to document the historical aspects of our parks through a program called 'Know Your Parks'. This program would list all the interesting aspects of each park, including its history, and would be listed on the City's Parks Commission webpage. The information could also be located on designated markers at each park. This program would support additional economic development initiatives, as identified by the City's economic consultant, including strengthening Newburyport's branding and identifying an on-line presence for visitors seeking a full package of destinations to enjoy within the City.

Support for the Open Space and Recreation Plan (2020):

Newburyport's Open Space and Recreational plan, adopted in 2020, was informed by a community survey, in which residents and stakeholders gave reasons for their decisions to live in Newburyport. Chief among these were the City's natural beauty, it's historic and cultural assets, and its open space and recreational opportunities. Newburyport has a strong sense of place and civic pride that is inherently tied to its heritage landscapes, open spaces, and recreational opportunities.

Included in the recommended action items of the OSRD goals is an overall theme of protecting open space, supporting recreation, and conducting a high level of parks maintenance. This Parks Reorganizational Plan aims to execute on these critical goals by reducing redundancies and streamlining effective action and communication as detailed below:

Objective 1C: Plan for unmet recreation needs.

Detail: Included in the Parks Commission's core value 'Health & Wellness', is the goal to further support the recreational needs of the City's residents and visitors. One suggestion that was brought up during the Commission's recent Visioning Sessions was a desire for an annual review of both the Parks Commission's Master Plan, as well as the City's list orphaned properties (properties that are owned by the City but are not designated to any particular department) in order to determine if our City's open spaces are being utilized in the most effective manner. This annual review would take place between the Parks Commission, Mayor's office, Planning Department and any other pertinent Boards, Commissions and/or Departments that may have a stake in the conversation. This exercise would be a useful and broad-reaching review of City priorities for its open spaces, ensuring the best and highest use is being implemented to support the critical needs of its residents.

Objective 1C: Maintain and conduct renovations, as needed, of existing parks and recreational facilities.

Detail: There are many pertinent action items in this section of the City's OSRP that will be supported by the Parks Reorganization Plan. Item #1, 'to fund a fully-staffed Parks [Division]', will be fulfilled by allowing for the sharing of resources and labor that currently exist within the Department of Public Services, to supplement the existing skilled labor of the Parks Department staff, which will move under the DPS umbrella as a standalone Division. Similarly, item #6, 'to establish a new parks [division] office' will be accomplished by sharing space on Perry Way for the Parks staff that will merge into DPS. Both are examples of how collapsing the two departments will save money and improve efficiencies.

Item #2, 'annually update and implement CIP plans for parks and recreation' will continue to be supported by utilizing the existing structures within DPS, specifically the Business Manager, Parks Manager and DPS Director's roles, with support from the Mayor's and Planning office, who will be able to effectively budget, procure, and project manage these priority projects. By sharing resources and supporting efficiencies, item #7 'continue to advocate for increases in the operating budget' will likely be less onerous as projects, as demonstrated at the Joppa Park and Atwood Lighting projects this past fall, were completed on time and under budget in both instances due to the streamlining of process and elimination of redundancies.

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Item #3, 'explore neighborhood-based approaches for oversight and maintenance of Newburyport parks', is one of the key priorities of the new Port Parks Alliance, who will be the new support arm of Newburyport's parks in terms of volunteerism and fundraising.

Objective 2B: Provide recreation opportunities for people with varying interests and abilities. Detail: Action items #1, 'work with COA to identify types of active recreation trending with seniors and identify opportunities to meet those needs' and #9 'identify the need for expanded Youth Services staff to serve youth recreational needs', are important reasons why this Parks Reorganization Plan references Newburyport Youth Services as the appropriate department to shepherd the recreational offerings in our parks, and we believe we will be able to work with the Council on Aging as well in the implementation of recreational programs. Other priority action items listed in this section include exploring opportunities to expand fee-based adult recreation programs, which are currently comprised of 4-5 programs that rely on volunteer instructors.

Support for the Parks Commission's 10-year Strategic Visioning Plan:

Over the past three months, the Parks Commission has embarked upon a 10-year Strategic Visioning Plan to identify and prioritize core values and action items for our parks system over the next decade. The Commission continues to refine this Plan, and the core values are listed below, along with details on how the Parks Reorganization Plan provides appropriate supports to the 10-year Strategic Visioning Plan.

Core Value: Environmental Conservation

Detail: The Parks Commission will be working with the Parks Manager and Mayor's Office to set policies around critical climate issues, and schedule regular coordination meetings with appropriate City agencies in order to move some of the key priorities around climate change and resiliency forward, including reducing water needs, improving habitat, utilizing renewable energy sources, implementing green infrastructure, removing invasive plant materials, and protecting our waterfront parks from sea level rise.

Core Value: Health & Wellness

Detail: The Parks Commission aims to further support the recreational needs of the City's residents and visitors. The Parks Reorganization Plan includes expanding recreation offerings in our parks.

Core Value: Diversity, Equity & Inclusion

Detail: The Parks Commission will work to set policies around program offerings in our parks that support DEI initiatives. Also, the Commission will continue to work with the Parks Manager and Parks Division to ensure that any improvements to our parks and playgrounds continue to implement universal accessibility standards.

Core Value: Community Engagement & Communication

Detail: The Parks Commission will work with the Mayor's Office in order to revamp the Parks Commission's website with content related to historical and cultural information about our parks, a calendar of community events, and to support a stronger social media presence. The Port Parks Alliance will also work with the Parks Commission to support volunteerism in our parks, advocate for and educate about our parks, and help organize and manage volunteer opportunities, with assistance from the Parks Manager. All other public communications, meetings and minutes postings, and website updates will be managed by a DPS admin.

Core Value: Economic Vitality, Planning & Stability

Detail: Since the inception of the Parks Reorganization plan, a group of residents, the Port Parks Alliance, has organized with the mission to support advocacy, fundraising and volunteerism for our parks. Their intent is to meet annually with the Parks Commission in order to review the Commission's priority projects for that year, and to then provide the fundraising needed to fill any gaps in the budget for the projects. The Parks Commission will only accept monetary or in-kind donations if they are aligned with the Commission's priority projects as specified for that year, and all donations above \$500 will also be approved by the Mayor and City Council in compliance with City Policy and State Law.

The Commission also desires to execute an annual review of the City's orphaned properties (properties that are owned by the City but are not designated to any particular department) in order to determine if our City's open spaces are being utilized in the most effective manner. This annual review would take place between the Parks Commission, Mayor's office, Planning Department and any other pertinent Boards, Commissions, Departments and/or stakeholders. This exercise will be a useful and broad-reaching review of City priorities for its open spaces, ensuring the best and highest use is being implemented to support the most critical needs of the community.

Core Value: Historic Preservation

Detail: The Parks Commission will work with the Mayor's Office to create an easily accessible database of archived documents related to our park's history, and to develop a self-guided historical walking tour through Newburyport's parks. The Commission will continue to champion projects that aim to preserve historical assets in our parks.

Next Steps

Article 5, Section 5-1 of the Charter lays out the process for the consideration of the Reorganization plan. It states in pertinent part:

"Whenever the mayor proposes an administrative order, the city council shall hold one or more public hearings on the proposal giving notice by publication in a local newspaper, which notice shall describe the scope of the proposal and the time and place at which the public hearing will be held, not less than seven nor more than fourteen days following said publication. An organization or reorganization plan shall become effective at the expiration of sixty days following the date the proposal is submitted to the city council unless the city council shall, by a majority vote, within such period vote to disapprove the plan. The city council may vote only to approve or to disapprove the plan and may not vote to amend or to alter it."

The Mayor anticipates this plan will be considered by either the Public Works & Safety Committee or the Community Services Committee, given their oversight of the Department of Public Services, the Parks Department, and the Parks Commission. The Mayor's Office looks forward to answering questions about this plan from the public at the necessary hearings, and will work to communicate how the proposed changes will affect residents. The plan will become official 60 days after its presentation to the Council, which will be March 31, 2023, unless the Council decides to disapprove of the plan. The City will submit all needed budget transfers to carry out this plan in the coming weeks and use the FY24 budget process to complete the transition.

Conclusion

From its inception, the goal of this plan has been to make our Parks stronger by improving efficiencies and eliminating redundancies. This Parks Reorganization plan identifies and aligns the unique skill sets that currently exist within our City to support the needs of our parks in a way that will sustain them well into the future.

Throughout this process, it has been clear that Newburyport residents feel a strong connection to our City's parks and open spaces. They are what help give Newburyport its strong sense of place and civic pride. We look forward to advancing this plan in order to ensure that our parks receive the attention that residents expect, whether that be in daily operations and maintenance, in completing a capital project, or in assisting a resident in reserving a park for their next event. The City's parks require excellence in management, planning, and maintenance, and this reorganization plan is designed to keep a strong focus on our parks for years to come.

Function	Task	Department Assigned	Position Assigned	Notes
OPERATIONS)			
	Coordinating purchase and installation of new materials and equipment	DPS	Parks Manager	Manager already does much of this supervision
	Quarterly inspection of existing facilities and equipment	DPS	Parks Manager	Parks Manager received Playground Inspection Certification 10/2022
	Coordinating with Newburyport Public Schools and other parks related organizations	DPS	Parks Manager	
	Coordination with Youth Leagues on athletic field licensing agreements	DPS	Parks Manager	Mayor's Office will also be involved as appropriate
	Coordination of Memorial bench program	DPS	Business Manager & Parks Manager	Program will be run by Port Parks Alliance, following the Parks Commission's 2022 policy, with coordination by the Business Manager and Parks Manager

Function	Task	Department Assigned	Position Assigned	Notes
ADMIN		1		
	Answering questions from and interfacing with public	DPS	Administrative Assistant	Admin will forward messages to the appropriate parties based on issue: maintenance to Parks Manager, policy and capital requests to Commission, project management to MSP or Planning Dept, etc. DPS already handles communications regarding projects, and will be able to use its existing notification and work order systems to provide more targeted notice to abutters and other affected residents.
	Creating agendas, minutes and postings for Parks Commission meetings	DPS	Administrative Assistant (stipend position)	All assistance with Parks Commission will be subject to stipend, similar to that of Water and Sewer Commission
	Bring permits to Parks Commission in need of approval	DPS	Administrative Assistant (stipend position)	
	Approve pro-forma permits that do not need Commission approval and coordinate master calendar of parks reservations	DPS	Administrative Assistant	When only issue is scheduling, DPS can approve permits if given authority by Parks Commission

Function	Task	Department Assigned	Position Assigned	Notes			
PROJECT MA	ROJECT MANAGEMENT						
	Managing Capital project development, budgeting and approval from Mayor and City Council	DPS & Mayor's Office	Business Manager/Manager of Special Projects				
	Carry out procurement process for contracted items	DPS	Business Manager	DPS Business Manager is City's procurement point person			
	Coordination with contractors to implement improvements	DPS	Parks Manager				
	All other project management of park improvements	DPS & Mayor's Office	Parks Manager/Manager of Special Projects				
	Update Department website with project updates & notifications	DPS	Administrative Assistant				

Function	Task	Department Assigned	Position Assigned	Notes
BUDGET				
	Prepare annual budget requests	DPS	Business Manager	
	Manage Capital Improvement Plan requests	DPS & Planning Office	Business Manager/Planner	Planner tracks which projects from Parks Master Plan can be added to CIP
	Establish and manage user fees	DPS	Business Manager/Parks Commission	With approval by the City Council
	Pursue grant funding for parks improvements	Mayor's Office	Grants Developer	Port Parks Alliance, Planning Department and Mayor's Office can also assist
	Manage donations and gift approval by City Council	DPS	Business Manager	All gifts above \$500 require City Council approval; Business Manager will work with Port Parks Alliance to manage

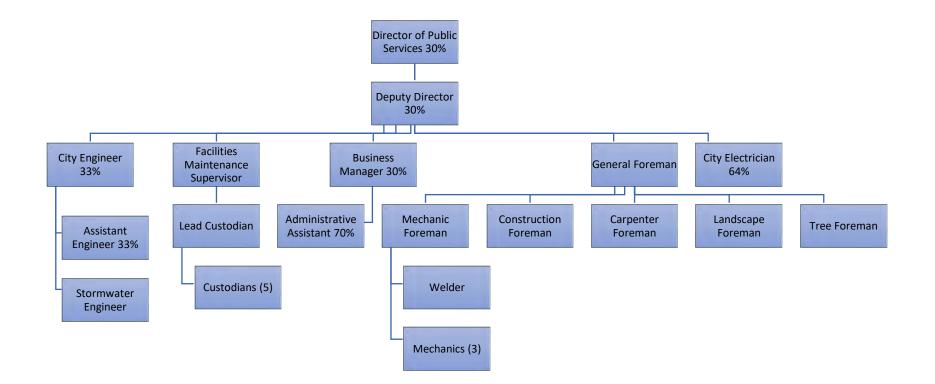
Function	Task	Department Assigned	Position Assigned	Notes
COMMISSION	I SUPPORT			
	Coordinating the Parks Commission's 10-year Strategic Vision Plan	Mayor's Office & Planning Department	Manager of Special Projects/Planner	Manager of Special Projects assists with capital projects. Planner assists with long-term vision, and drives economic vitality initiatives related to arts, culture and open space, alongside Parks Commission.
	Coordinating parks component of Open Space and Recreation Plan	Mayor's Office & Planning Department	Manager of Special Projects/Planner	Manager of Special Projects assists with capital projects. Planner assists with long-term vision, and drives economic vitality initiatives related to arts, culture and open space, alongside Parks Commission.

Function	Task	Department Assigned	Position Assigned	Notes
ADULT REC				
	Contracting with instructors/organizers for adult recreation classes and activities	NYS	Associate Director of Recreation	
	Managing registration and other logistics for classes and activities	NYS	Associate Director of Recreation	Already have registration systems for classes and activities

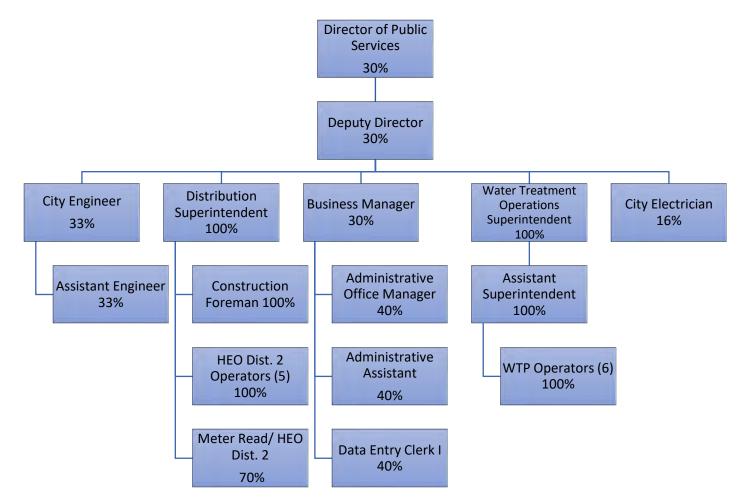
Function	Task	Department Assigned	Position Assigned	Notes
	ATION, EVENTS, & VOLUNTEERING			
OURLACH	Update Parks Commission website	Mayor's Office	Manager of Special Projects with maintenance by DPS Admin	Update Parks Commission website with list and maps of parks, rules & regulations, fee schedule, permit process, policies & calendar of annual reviews and tasks such as Master Plan review, grant requests, policy reviews, etc.
	Issue press releases and communicate with media on Parks	Mayor's Office	Mayor/Chief of Staff/PR Consultant	Will utilize existing PR contract and communications assistance from Mayor's Office
	Organize volunteers for parks maintenance and special events	DPS & Port Parks Alliance	Port Parks Alliance with assistance from Parks Manager	With assistance from DPS and Mayor's Office as needed
	Posting information to social media regarding events, announcements, etc.	Parks Commission & Port Parks Alliance	Parks Commission & Port Parks Alliance	With support from DPS, who as active channels and can migrate info as needed

Function	Task	Department Assigned	Position Assigned	Notes
MORRILL FOUNDATION				
	Coordinate annual requests for Morrill Foundation	Parks Commission & Mayor's Office	Commissioners/Manager of Special Projects	List will be finalized by Parks Commission
	Liaison to Morrill Foundation	Mayor's Office	Manager of Special Projects	

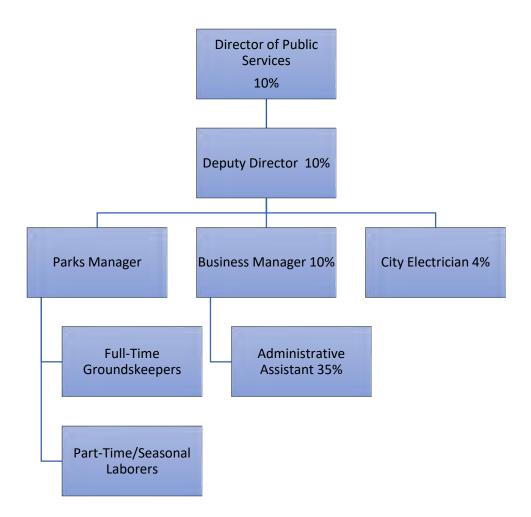
DPS-Highway



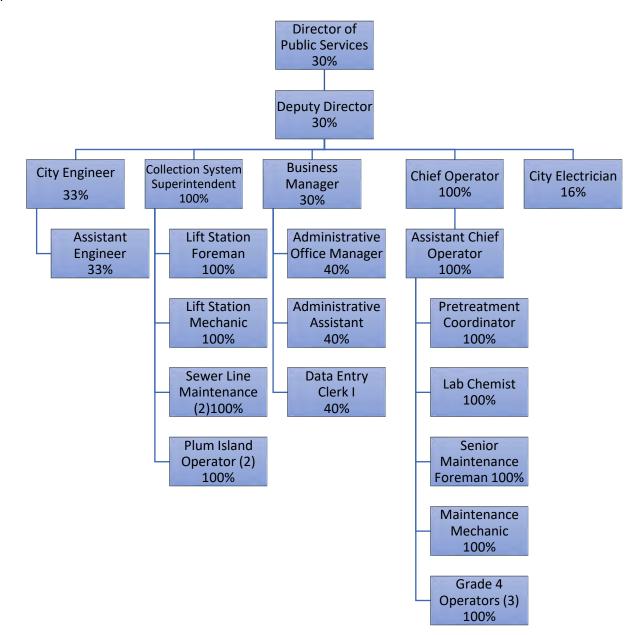
DPS-Water



DPS – Parks



DPS-Sewer



CITY OF NEWBURYPORT



ORDERED:

January 30, 2023

RESOLUTION A PURPLE HEART CITY

IN CITY COUNCIL

WHEREAS, The City of Newburyport in the state of Massachusetts has always supported its military veteran population; and

WHEREAS, The Purple Heart is the oldest military decoration in present use and was initially created as the Badge of Military Merit by General George Washington in 1782; and

WHEREAS, The Purple Heart was the first American service award or decoration made available to the common soldier and is specifically awarded to members of the United States Armed Forces who have been wounded or paid the ultimate sacrifice in combat with a declared enemy of the United States of America; and

WHEREAS, The mission of the Military Order of the Purple Heart is to foster an environment of goodwill among the combat-wounded veteran members and their families, promote patriotism, support legislative initiatives, and most importantly – make sure we never forget; and

WHEREAS, the City of Newburyport has a large, highly decorated veteran population, including many Purple Heart recipients; and

WHEREAS, Newburyport appreciates the sacrifices our Purple Heart recipients made in defending our freedoms and believe it is important that we acknowledge them for their courage and show them the honor and support they have earned.

NOW, Therefore, the City of Newburyport, by and though its City Council, proclaim Newburyport 'A PURPLE HEART CITY' and encourage the citizens of the City of Newburyport to show their appreciation for the sacrifices that the Purple Heart recipients have made in defending our freedoms, to acknowledge their courage, and to show them the honor and support they have earned.

Councillor Byron J. Lane

Councillor James J. McCauley

IN CITY COUNCIL



ORDERED:

January 30, 2023

RESOLUTION PETER "PETE" POLLARD

WHEREAS, Peter "Pete" Pollard was born in Newburyport on July 29, 1958, he was the son of the late Charles and Patricia (Little) Pollard and was a graduate of Newburyport High School, Class of "77".

WHEREAS, Pete was a lifelong resident of the city of Newburyport, who possessed great pride in his hometown and supported it in any way he could; and

WHEREAS, he was an Athletic Trainer for both Newburyport and Triton Schools. Helping those in youth sports become better athletes and was truly dedicated to letting them know he was cheering them on, not just fixing their injuries; and

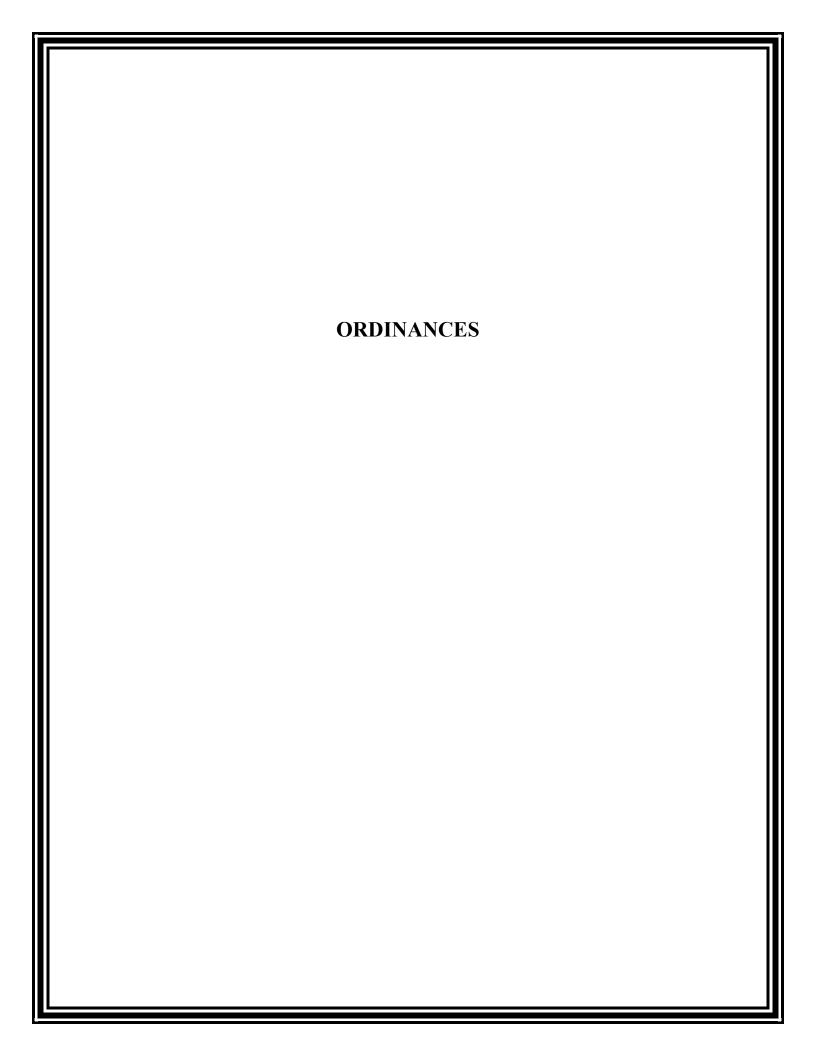
WHEREAS, Pete was a Newburyport was a fixture on the corner of State Street and Pleasant Street for many years he would greet all residents with a friendly welcome and a wave, and a hearty call of "YEAT." And would always acknowledge everyone who passed by with a smile and simple "Hello." and

WHEREAS, Pete exemplified what it is to make Newburyport's Downtown a kind and welcoming Place; and

NOW, Therefore, the City of Newburyport by and through its City Council hereby authorizes the placement of a plaque on or upon the corner of State Street and Pleasant Street which shall state 'Pete's Corner." And be a reminder to all who pass-by, to be a little kinder, and make those fortunate enough to know Pete, smile.

Councillor Byron J. Lane

Councillor Constance Preston





IN CITY COUNCIL

ORDERED:

January 30, 2023

A ZONING ORDINANCE AMENDMENT TO REMOVE THE ALLOWANCE OF "ITIF" SPECIAL PERMITS FOR RESIDENTIAL USES

Be it ordained by the City Council of the City of Newburyport as follows:

Amend Section VII-A, entitled "Off-Street Parking Regulations" as follows, with deletions double-stricken and italicized, and additions <u>double-underlined and italicized</u>:

New uses or development: No use of any premises shall be authorized or extended and no building or structure shall be erected or enlarged, unless on-site or off-site parking is provided for such extension, erection, or enlargement, as provided herein; provided, however, that for any use or structure both (1) lawfully existing as of December 17, 2017, and (ii) currently located within three hundred (300) feet of a municipal parking lot and/or municipal parking structure that is located within the Downtown Overlay District (DOD), any lawful deficiency in the number or dimensions of accessory, off-street parking spaces that existed on December 17, 2017, may be continued at the same lot by right, notwithstanding any lawful extension, alteration, or change of such use or structure. Any outdoor parking spaces shall be treated with a surface binder, gravel or crushed stone surface. Except as otherwise provided under section XXIV or, alternatively, through a special permit from the planning board as set forth below, all parking spaces shall be provided as follows:

- (1.) For non-residential uses parking spaces may be (i) on site; (ii) off-site within a private parking lot or a private parking structure within three hundred (300) feet of the principal building, structure or use on the premises, by right with evidence of lease or easement of the minimum duration, as provided below; or (iii) off-site within a municipal parking lot and/or structure that is located within the Downtown Overlay District (DOD), within three hundred (300) feet of the principal building, structure or use on the premises by special permit from the planning board with payment into the intermodal transportation improvement fund (ITIF), as provided below.
- (2.) For residential uses parking spaces may be (i) on-site; <u>or</u> (ii) off-site within a private parking lot or a private parking structure within three hundred (300) feet of the principal building, structure or use on the premises, by right with evidence of lease or easement of the minimum duration, as provided below; or (iii) within a municipal parking lot and/or structure that is located within the Downtown Overlay District (DOD), within three hundred (300) feet of the principal building, structure or use on the premises by special permit from the planning board with payment into the ITIF, as provided below.

Notwithstanding the above, no development or use (residential or non-residential) may utilize, or obtain a special permit for use of, municipal parking lots and/or structures to meet the requirements of this section, where such development or use falls within the geographic boundaries of the Waterfront West Overlay District (WWOD).

When a private lot or parking structure is proposed to satisfy the parking requirements, a recordable lease or easement with a term of least five (5) years in duration must be provided to the permit granting authority.

	Private parking lot	Private parking structure	Municipal parking lot that is located within the Downtown Overlay District (DOD)	Municipal parking structure that is located within the Downtown Overlay District (DOD)
Residential use	By right, with	By right, with	Not Permitted	Not Permitted
(principal building,	evidence of lease or	evidence of lease or	Special permit	Special permit
structure or use	easement of	easement of	from planning	from Planning
within three	minimum duration	minimum duration	board with	Board with
hundred (300)			payment into ITIF	payment into ITIF
feet)				
Non-residential	By right, with	By right, with	Special permit from	Special permit from
use (principal	evidence of lease or	evidence of lease or	planning board with	planning board with
building, structure	easement of	easement of	payment into ITIF	payment into ITIF
or use within three	minimum duration	minimum duration		
hundred (300)				
feet)				

The foregoing provisions regarding off-site parking are summarized in the following table:

For the purposes of determining the distance requirement for off-street parking, the measurement shall be taken in a straight line from the appropriate lot line of the off-street parking lot or parking structure to a pedestrian entrance to the associated principal building, structure or use on the premises.

In the event a proposed development includes more than one use, the parking requirement shall be the sum total of the requirements for the individual uses.

Notwithstanding the requirements of this section, "shared" parking areas may be allowed to meet the requirements of this section (for a reduction in total parking spaces) by a special permit granted by the planning board, pursuant to this section, for uses having different peak times of parking demand. Grant of a special permit from the planning board for such "shared" parking arrangements shall be issued only after planning board review and approval of a written parking demand analysis provided by the applicant. The planning board may, at its sole discretion, require a peer review of such analysis.

Dimensional requirements: Exclusive of driveways or aisles, an area consisting of eighteen (18) feet by nine (9) feet shall be considered as one off-street parking space. The minimum aisle width for ninety-degree parking shall be twenty-four (24) feet for two-way traffic. Angle parking shall require a one-way traffic aisle with an eighteen-foot aisle width for sixty-degree parking and thirteen (13) feet for forty-five-degree parking.

Use of municipal lots: The planning board shall act as special permit granting authority (SPGA) for the purposes of permitting use of municipal parking lots and/or structures for **residential and** non-residential uses to provide required off-street parking.

The use of municipal parking lot(s) and/or structures is permitted for all **residential and** nonresidential uses to provide required off-street parking by special permit from the planning board and payment into the ITIF, as provided below. The special permit for use of municipal parking lots and/or structures shall require both compliance with the requirements of the ITIF and a determination that the requested use is essential and/or desirable to the public convenience or welfare.

Intermodal transportation improvement fund (ITIF): The city hereby creates a dedicated municipal revenue fund whose purpose is to provide for necessary funding to support transportation related improvements that are necessitated by use of municipal parking lots and structures by **residential and** non-residential uses. The improvements necessitated by such uses are intended: to increase the supply of available public parking spaces which would otherwise be available if not for use of the municipal parking lots and/or structures by such non-residential users; to allow for related improvements that are necessitated by the use of municipal parking lots and/or structures by such non-residential users; and to pay for increases in the cost of operating and maintaining municipal parking lots and/or structures which said costs can be directly attributed to the use of the municipal parking lots and/or structures by such non-residential users. It is intended that all property owners that request a special permit from the

SPGA to utilize a municipal parking lot(s) to meet their off-street parking requirements shall meet the requirements of this section.

Recognizing the particular intermodal transportation and parking needs of the relevant districts, the SPGA may allow an unmet parking need credit (UPNC) to be applied and deposited in the ITIF as a method of meeting the parking requirements of section VII for **residential and** non-residential uses. As provided in this section, the UPNC may only be requested by a property owner of a **residential or a** non-residential use within three hundred (300) feet of an off-street municipal parking lot and/or structure. Applications shall be administered by the SPGA as part of the special permit process and calculated using the table listed in the intermodal transportation improvement fund.

To calculate this credit, any unmet parking need shall be calculated by multiplying the required unmet parking need by a rate of seven thousand five hundred dollars (\$7,500.00) per space in a municipal parking lot and/or structure, plus an adjustment (increase) in accordance with the consumer price index (CPI) for construction issued by the United States Bureau of Labor Statistics. Prior to the issuance of a building permit, the resulting dollar amount shall then be deposited in the ITIF. The ITIF shall be used to provide support for transportation related improvements cited above, operations and shall be controlled and administered by the city council. The use of funds collected under this ITIF limited to the above noted improvements or such other improvements that are directly necessitated by use of municipal parking structures by **residential or**-non-residential uses to provide required off-street parking.

SPGA approval for the use of nearby municipal parking lots and/or structures to meet the offstreet parking requirements of this section shall not constitute a permanent or exclusive right or guarantee of access to such parking spaces by the applicant, associated residents, tenants or otherwise. Rather, such SPGA approval (with corresponding payment into the ITIF) shall enable the applicant to take credit for nearby public parking spaces in fulfilling the minimum parking calculations required under this section for proposed uses at the time of permitting. Unless otherwise permitted by the City of Newburyport, all such parking spaces located in municipal parking lots shall be considered shared parking spaces, available on a first come, first served basis.

Councillor James J. McCauley



IN CITY COUNCIL

ORDERED:

January 30, 2023

A GENERAL ORDINANCE AMENDMENT TO ADDRESS PLANNING BOARD MEMBERSHIP:

Be it ordained by the City Council of the City of Newburyport as follows:

Amend the Code of Ordinances Chapter 2 Division 4 (Planning Board) as follows, with deletions doublestricken and italicized, and additions double-underlined and italicized:

Sec. 2-116. - Established; membership; appointment.

The planning board for the city is hereby established under the provisions of M.G.L.A. c. 41, §§ 81A—81J inclusive. Such board shall consist of nine (9) members <u>until such time as the transition</u> to a seven-member board, as provided for in this Ordinance, is complete, upon which the board shall consist of seven (7) members. The members shall be appointed by the mayor and confirmed by the city council.

Sec. 2-117. - Terms of office; filling vacancies.

When the first appointment is made to the planning board, three (3) members shall be appointed for the term of one (1) year, three (3) for the term of two (2) years, one (1) for the term of three (3) years, one (1) for the term of four (4) years, and one (1) for the term of five (5) years, from the date of their appointment. As the term of each member expires, his successor shall be appointed for the term of five (5) years. Planning board members shall be appointed <u>for terms of three (3) years</u>. A vacancy occurring otherwise than by expiration of term shall be filled for the unexpired term in the same manner as in the case of an original appointment.

Sec. 2-118. - Election of chairman, clerk officers.

The planning board shall, as soon as practicable, after the appointments of the members have become operative, and annually thereafter, elect a chairman, vice chair and clerk secretary from its own membership.

Sec. 2-119. - Members to serve without pay; powers and duties.

The members of the planning board shall serve without pay and shall have the powers and authority to perform the duties set forth in <u>MGL</u> M.G.L.A. c. 41, §§ 81A—81J inclusive, relative to local planning boards, *and in MGL c. 40A relative to special permit granting authorities*.

<u>Sec. 2-119A. – Transition to Seven-member board.</u>

<u>Members of the nine-member board on the effective date of this section shall continue to serve</u> <u>until they resign or their terms expire. The board shall continue to consist of nine (9) members</u> <u>and act as a nine-member board until two seats become vacant due to resignation or expiration</u> <u>of term; at which time the board shall consist of seven members and become a seven-member</u> <u>board. A seat on the board that becomes vacant due to resignation or expiration of term shall</u> <u>not be filled until the number of members is less than seven (7).</u>

Councillor Edward C. Cameron, Jr.

To: Newburyport City Councilors

Re: Proposed Change to Planning Board Membership

Date: 12/6/2022

The Planning Board proposes a change in the membership of the Board consisting of three parts:

- 1. Reduce the membership of the Board from nine to seven members;
- 2. Authorize the appointment of two associate members for voting on special permit applications;
- 3. Set the term of membership at three years, rather than the current five years.

The first two changes will reduce the required supermajority vote for special permits from six to five positive votes, while keeping the pool of potential voting members at nine (seven regular members plus two associate members). This will make it less likely that an applicant will face a delay in receiving approval due to the Board having an insufficient number of qualified members in attendance at a meeting. The third change is intended to make it easier to attract candidates for membership by reducing the initial commitment of years.

In order to effect these proposed changes, the Planning Board respectfully requests the City Council to adopt amendments to both the general ordinances and the zoning ordinance.

First, the Planning Board requests the City Council to adopt proposed amendments to the City's Code of Ordinances that would reduce membership on the Board from nine to seven permanent members. The term of office would be reduced from five years to three years, except when a new member fills a vacant position for an unexpired term of a resigning member. A "transition" period will allow a change from 9 members to 8 members when the first current member resigns or his/her term expires and to 7 members when the next seat becomes vacant.

Second, the Board requests the Council to adopt an amendment to the City Zoning Ordinance to authorize the appointment of up to two associate members for the purpose of acting on special permit applications. This is consistent with the existing provision in the Zoning Ordinance for associate members of the Zoning Board of Appeals (Sec. X-H.1).

The proposed change to the Zoning Ordinance also includes a change from a specific number of positive votes to "two-thirds" for special permit decisions. This is consistent with the state statute on special permits (Chapter 40A, section 9) and accommodates the change in number of members during the proposed transition period. Reference is also made to the simple majority rule for certain housing-related special permits as provided in the 2021 amendment to Chapter 40A.

Reducing the number of members and authorizing the appointment of associate members as proposed will allow for more efficient meetings and decision-making.

Thank you for your consideration. Regards,

Bonnie Sontag, [Former] Chair Newburyport Planning Board Rick Taintor, Chair [Formerly Vice-Chair] Newburyport Planning Board



IN CITY COUNCIL

January 30, 2023

ORDERED:

A ZONING ORDINANCE AMENDMENT TO ADDRESS THE PLANNING BOARD WHEN ACTING AS SPECIAL PERMIT GRANTING AUTHORITY (SPGA)

Be it ordained by the City Council of the City of Newburyport as follows:

Amend the title of Section X-H as follows, with deletions *double-stricken and italicized*, and additions *double-underlined and italicized*:

X-H - Board of <u>A</u>appeals <u>and Planning Board</u>.

Amend Section X-H.7.B.(9) as follows, with deletions *double-stricken and italicized*, and additions *double-underlined and italicized*:

(9) The *zoning-board* **SPGA** shall state in its conditions whether the special permit which has been granted runs with the land or the owner of the property.

Amend the second paragraph of Section X-H.8 as follows, with deletions *double-stricken and italicized*, and additions *double-underlined and italicized*:

Within ninety (90) days following the date of the public hearing, the SPGA shall take final action on the special permit application or petition. Issuance of a special permit shall require a positive vote of <u>the number of</u> no less than four (4) members of the SPGA <u>zoning board of appeals</u> <u>required pursuant to MGL c. 40A §9</u>. If the SPGA fails to act within ninety (90) days, the petition or application for a special permit shall be deemed granted.

Amend Section X-I as follows, with deletions *double-stricken and italicized*, and additions *double-*<u>underlined and italicized</u>:

No appeal, application or petition which has been unfavorably and finally acted upon by the <u>SPGA</u> <u>or permit granting authority</u> zoning board of appeals shall be acted favorably upon within two (2) years after the date of final unfavorable action unless <u>said SPGA or permit granting authority</u> the zoning board of appeals finds, by a vote of four (4) members of a board of five members or two-thirds vote of a board of more than five members, specific and material changes in the conditions upon which previous unfavorable action was based, and describes such changes in the record of its proceedings, and unless all but one of the members of the planning board consents thereto and after notice is given to parties in interest of the time and place of the proceedings when the question of such consent will be considered.

Any petition for a variance or application for a special permit which has been transmitted to the <u>SPGA or permit granting authority</u> zoning board of appeals may be withdrawn, without prejudice by the petitioner prior to the publication of the notice of a public hearing thereon, but thereafter be withdrawn without prejudice only with the approval of the <u>SPGA or permit</u> granting authority zoning board of appeals.

Insert the following new Section X-K as follows:

X-K Planning Board as Special Permit Granting Authority (SPGA)

- 1. *Associate members.* The planning board shall have two (2) associate members who shall be appointed by the mayor and confirmed by the city council for terms of three (3) years.
- 2. *Designation by the chair.* The chair of the planning board may designate an associate member to sit on the board for the purposes of acting on a special permit application, in the case of absence, inability to act, or conflict of interest, on the part of any member of the planning board or in the event of a vacancy on the board.

Councillor Edward C. Cameron, Jr.

To: Newburyport City Councilors

Re: Proposed Change to Planning Board Membership

Date: 12/6/2022

The Planning Board proposes a change in the membership of the Board consisting of three parts:

- 1. Reduce the membership of the Board from nine to seven members;
- 2. Authorize the appointment of two associate members for voting on special permit applications;
- 3. Set the term of membership at three years, rather than the current five years.

The first two changes will reduce the required supermajority vote for special permits from six to five positive votes, while keeping the pool of potential voting members at nine (seven regular members plus two associate members). This will make it less likely that an applicant will face a delay in receiving approval due to the Board having an insufficient number of qualified members in attendance at a meeting. The third change is intended to make it easier to attract candidates for membership by reducing the initial commitment of years.

In order to effect these proposed changes, the Planning Board respectfully requests the City Council to adopt amendments to both the general ordinances and the zoning ordinance.

First, the Planning Board requests the City Council to adopt proposed amendments to the City's Code of Ordinances that would reduce membership on the Board from nine to seven permanent members. The term of office would be reduced from five years to three years, except when a new member fills a vacant position for an unexpired term of a resigning member. A "transition" period will allow a change from 9 members to 8 members when the first current member resigns or his/her term expires and to 7 members when the next seat becomes vacant.

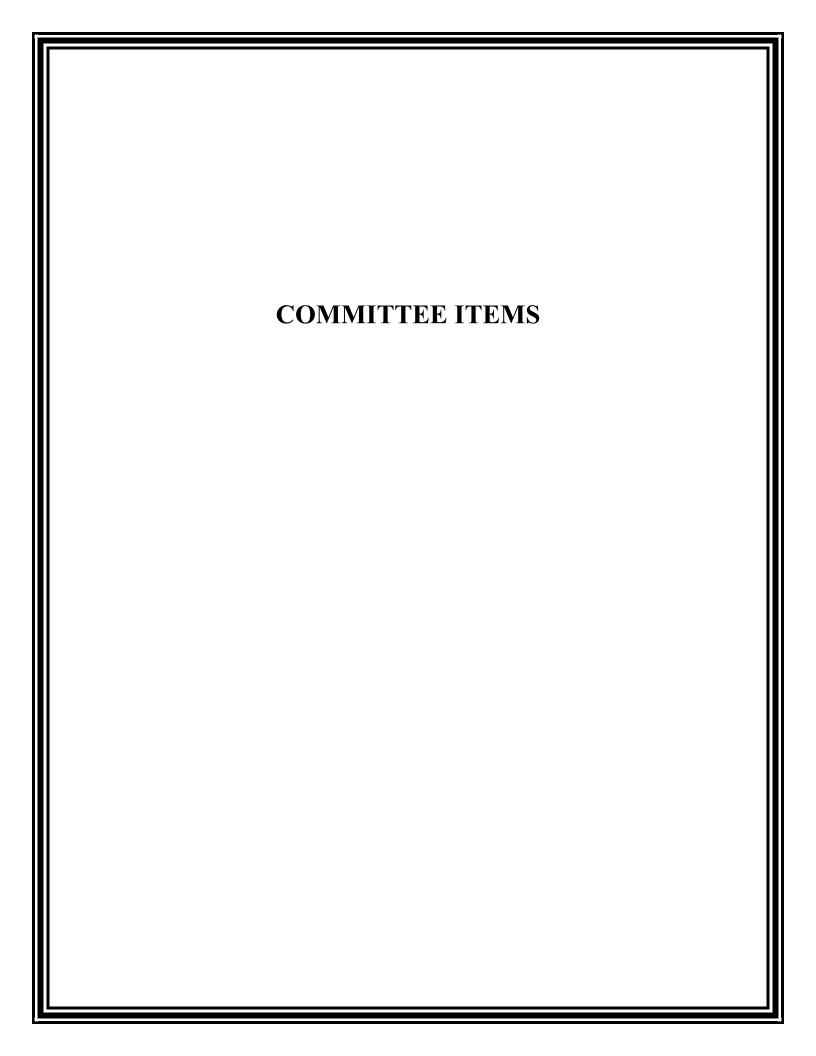
Second, the Board requests the Council to adopt an amendment to the City Zoning Ordinance to authorize the appointment of up to two associate members for the purpose of acting on special permit applications. This is consistent with the existing provision in the Zoning Ordinance for associate members of the Zoning Board of Appeals (Sec. X-H.1).

The proposed change to the Zoning Ordinance also includes a change from a specific number of positive votes to "two-thirds" for special permit decisions. This is consistent with the state statute on special permits (Chapter 40A, section 9) and accommodates the change in number of members during the proposed transition period. Reference is also made to the simple majority rule for certain housing-related special permits as provided in the 2021 amendment to Chapter 40A.

Reducing the number of members and authorizing the appointment of associate members as proposed will allow for more efficient meetings and decision-making.

Thank you for your consideration. Regards,

Bonnie Sontag, [Former] Chair Newburyport Planning Board Rick Taintor, Chair [Formerly Vice-Chair] Newburyport Planning Board



Committee Items – January 30, 2023

Budget & Finance

In Committee:

- ORDR00409 01 09 2023
- TRAN00146_01_09_2023 \$125,000
- TRAN00145_01_09_2023 \$10,741
- ORDR00404_01_09_2023
- ORDR00402_12_12_2022
- ORDR00403 12 12 2022
- ORDR00400 12 12 2022
- ORDR00405 01 09 2023
- ORDR00406_01_09_2023
- ORDR00407_01_09_2023
- ORDR00408_01_09_2023
- ORDR00411_01_09_2023
- ORDR00412 01 09 2023

DPS: Receipts Reserved for Appr. Fuel \$125,000 to DPS Highway Fuel & Oil Finance: General Fund-Free Cash \$10,741 to Essex North Shore Tech School

Pay Prior Year Bills

Belleville Improvement Society Gift Acceptance

Cutter West End Fire Station Loan Order (COTW)

- Central Congregational Church Gift Acceptance
- Morrill Foundation Gift Acceptance
 - FoNT Gift Acceptance
- SAGA Gift Acceptance
- Goldy Sculpture Gift Acceptance
- 3 Cardinals in a Tree Sculpture Gift Acceptance
 - FY2023 COLA Increase
 - COLA Base Increase



IN CITY COUNCIL

ORDERED:

January 9, 2023

THAT, a loan order in the amount of \$5,930,000 for the Cutter West End Fire Station project (ORDR00280_09_13_2021), which was approved by City Council on November 29, 2021 and signed by the Mayor on December 3, 2021, is hereby rescinded and replaced with the following:

ORDERED THAT: \$9,190,000 is appropriated to pay costs of design, bidding, construction administration, owner's project manager/clerk of the works, construction, furnishing, and outfitting of an approximately 6,800 square foot new Cutter West End Fire Station, substantially similar to the plans prepared by Winter Street Architects dated March 2021 and presented in concept form to the Council on August 9th, 2021, including the payment of all costs incidental and related thereto, and that to meet this appropriation, the Treasurer with the approval of the Mayor, is authorized to borrow said amount under and pursuant to M.G.L. c. 44, §7(1), or pursuant to any other enabling authority, and to issue bonds or notes of the City therefor; and that the Mayor and the Treasurer are authorized to take any other action necessary or convenient to carry out this vote. Any premium received upon the sale of any bonds or notes approved by this order, less any such premium applied to the payment of the costs of issuance of such bonds or notes, may be applied to the payment of costs approved by this vote in accordance with M.G.L. c. 44, §20, thereby reducing the amount authorized to be borrowed to pay such costs by a like amount.

Councillor James J. McCauley

Councillor Sharif I. Zeid

In City Council January 9, 2023:

Motion to collectively refer ORDR00404, ORDR00405, ORDR00406, ORDR00407, ORDR00408, ORDR00409, ORDR00411, and ORDR00412 to Budget and Finance with note that ORDR00409 will also be simultaneously referred to COTW by Councillor Zeid, seconded by Councillor Preston. So voted.



Sean Reardon Mayor CITY OF NEWBURYPORT OFFICE OF PLANNING AND DEVELOPMENT 60 Pleasant Street • P.O. Box 550 Newburyport, MA 01950 (978) 465-4400

MEMORANDUM

TO: NEWBURYPORT CITY COUNCIL

FROM: GEORDIE VINING, SENIOR PROJECT MANAGER

CC: MAYOR SEAN REARDON; ANDREW LEVINE; KIM TURNER; ANDY PORT; STEVE BRADBURY; BARRY SALT; DENNIS MOREL; MOLLY ETTENBOROUGH; JAMES POPE; MICHAEL BARTLETT; ETHAN MANNING

SUBJECT: NEWBURYPORT WEST END FIRE STATION PROJECT

DATE: 1/3/23

We are writing to provide an update on the West End Fire Station project and request authorization of supplementary funding due to significant inflation-driven cost escalations in order to stay on track for bidding the project in the spring of 2023.

During 2022, the project team developed the design and permitting for this safe, new, modern facility as directed and authorized by the City Council on 11/29/21. The process to acquire the \$400K adjacent property and record it at the Registry took approximately three months subsequent to the City Council's funding authorization, and then the design team began work on the plans in the spring of 2022. Since the August 2022 project update to the City Council, the team has completed the following milestones:

- Planning Board Site Plan Review applied for and received permit
- MassDOT Highway Access permit submitted application, review pending
- National Grid met with National Grid re. power supply to new building; draft easement pending
- Owner's Project Manager hired CBRE as OPM to aid with design phase and oversee construction
- Energy managed consultants' energy modeling, Net Zero alternatives analysis, and development of Net Zero Energy Report
- Design Development plans developed architectural, structural, civil, mechanical, plumbing, fire protection, electrical, solar, and communications plans
- Cost estimates worked with professional cost estimator to generate detailed itemized cost estimate

In November 2022, we worked with the professional cost estimator Rider Levett Bucknall (RLB) to generate a detailed itemized cost estimate based on the plan set. The overall design and construction project cost is estimated to be \$9,191,892, which includes a 4.5% escalation to the start of construction in April 2023, a 5% construction contingency, cost of construction supervision and an Owners Project Manager, all design phase costs, and owner-supplied items. These cost estimates have been reviewed and agreed upon by multiple

subconsultants, the Building Inspector and other city staff, and CBRE, the OPM. These stakeholders were not able to identify additional opportunities for further value engineering. A funding gap exists of \$3,262,000 between the bonding authorization in the fall of 2021 (based on a schematic design estimate from early 2021) and the current projected cost of the new facility.

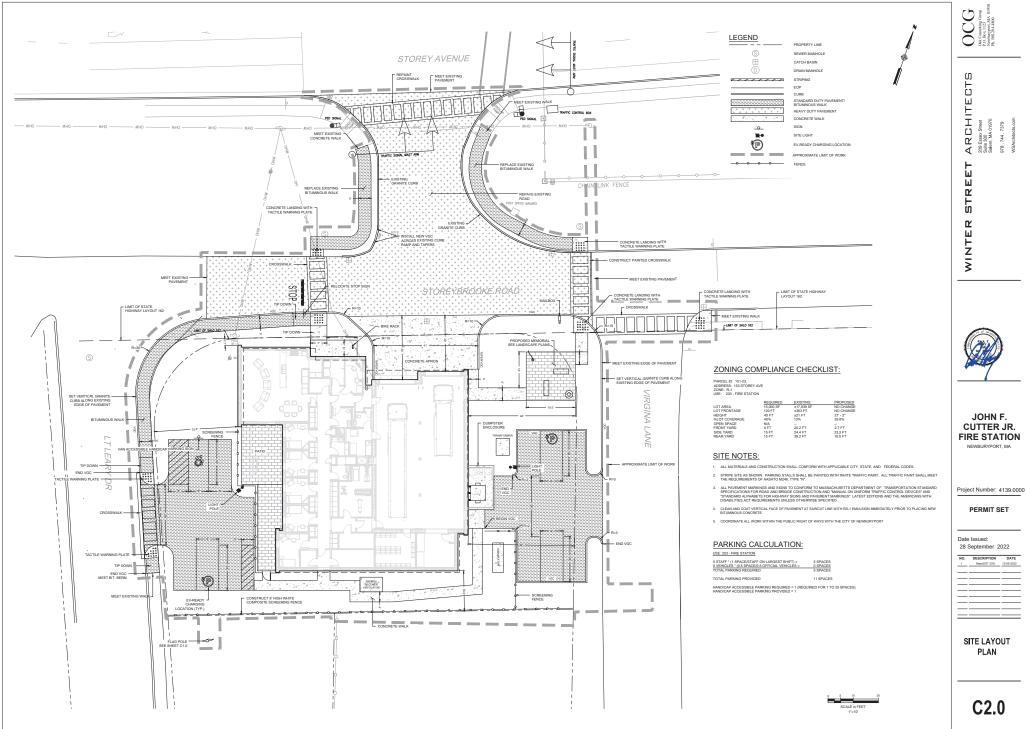
It is important to note that the funding gap is driven not by any change in the facility's program or design but by unprecedented nationwide/worldwide inflation-driven increases in material costs, supply chain bottlenecks, a tight labor market, fuel, and escalations in every sector. Costs are volatile and are generally rising at a higher rate than the Consumer Price Index. The Associated General Contractors of America (AGC) has noted that as demand for construction heated up in 2021-2022, inflation became established throughout the economy, and contractors' bid prices increased to match higher input costs. A number of factors are likely to keep costs high for the foreseeable future.

The project cost includes a \$350K solar photovoltaic panel system which is anticipated to generate as much power as consumed by the new facility, making it "net zero." The West End Fire Station should be eligible for a direct pay solar investment credit of 30% for this system, which has not been incorporated into the cost estimate as the procedures to implement the federal Inflation Reduction Act continue to be sorted out. Such a credit should reimburse a portion of the project cost. In addition, the annual savings on energy costs will pay for the capital cost in a few years and provide annual credits thereafter.

The project team is currently working on the details of the final Construction Documents. We expect to have final plans with complete design information submitted by the consultants and reviewed by the city and the OPM by the end of February 2023. We anticipate advertising the project in March 2023 with the target of receiving bids in late April 2023, contracting, and initiating the construction phase in May 2023. The construction phase is anticipated to take approximately 13 months with completion in the spring of 2024.

Please see the attached three-page budget summary along with the rendering and site plan. In addition, please see the associated revised loan order from Finance Director Ethan Manning. Thank you for your consideration.





© 2022, Winter Street Arcl

John F. Cutter, Jr. Fire Station Project Cost Estimate City of Newburyport

(1/3/2023)

EXISTING FUNDING	Revenues
City Council Order 280 approved 11/29/21	\$5,930,000 account # 3807-58200
PROJECT COST ESTIMATES	
Construction Subtotal (* includes 5% design contingency & 4.5% cost escalation allowance to April 2023 (\$683K) (* NOT include net zero MassSaves & federal ITC credits/rebates (15%-30% = \$50K-\$100K))	
5% Owner/Construction Contingency	\$385,333
Design Other design phase: geotech and hazmat	\$565,991 (WSA post-SD) \$18,891
OPM	\$165,016 (CBRE)
Other: Zetron alert/communications, IT, furnishings, exhaust extraction, etc.	\$350,000
Total Cost Estimates:	\$9,191,892
GAP:	\$3,261,892
Budget Gap (rounded):	\$3,262,000

John F. Cutter, Jr. Fire Station Project Construction Cost Estimate Subtotal City of Newburyport

(1/3/2023)

RIDER LEVETT BUCKNALL (RLB) CONSTRUCTION COST ESTIMATE SUMMARY (11/22)

Itemized Construction Cost Subtotal * (6,603SF) * Not including future MassSaves and	\$5,756,772 (RLB November 2022)	
General Conditions (13.9%)		\$800,000
Bonds and Insurance (3%)		\$196,703
Overhead and Profit (4%)		\$270,139
Design/Estimating Contingency (5%)		\$351,181
	(Total before Escalation)	\$7,374,795
Escalation Allowance to Start of Construction 4/2023 (4.5%)		\$331,866
ESTIMATED CONSTRUCTION COST SUBTOTAL (excluding s	soft costs)	\$7,706,661

John F. Cutter, Jr. Fire Station Project - Owner Supplied Items Cost Estimates City of Newburyport

(1/3/2023)

WINTER STREET ARCHITECTS - ADDITIONAL COSTS SCHEDULE

NEWBURYPORT WEST END FIRE STATION

FURNISHINGS Offce	Desk	1	\$3,500	\$3,500		
Chice	Chair	2	\$250	\$500		
Living Quarters	Ondi	L	Ψ200	4000		
	Chairs	5	\$900	\$4,500		
	Table	1	\$500	\$500		
Dining	Tuble	I.	φοσο	4000		
Bining	Chairs	6	\$200	\$1,200		
	Table	1	\$800	\$800		
Bunkrooms			,	,		
	Beds	5	\$650	\$3,250		
	Desks	5	\$500	\$2,500		
	Desk Chairs	5	\$200	\$1,000		
	Chairs	5	\$400	\$2,000		
Patio						
	Table	1	\$800	\$800		
	Chairs	6	\$150	\$900		
Delivery				\$2,500		
Contingency				\$2,500		
				Total	\$26,450	
EQUIPMENT AND OTHER CHARGES					<u> </u>	
Advertising /Bidding / Misc. Expense					\$1,000	
Advertising /Bidding / Misc. Expense Information Technology			1		\$25,000	
Advertising /Bidding / Misc. Expense Information Technology Zetron / Fire Communications			1 1			
Advertising /Bidding / Misc. Expense Information Technology			1	40 - 500	\$25,000 \$150,000	
Advertising /Bidding / Misc. Expense Information Technology Zetron / Fire Communications	Large		1 1	\$2,500	\$25,000 \$150,000 \$2,500	
Advertising /Bidding / Misc. Expense Information Technology Zetron / Fire Communications TV Monitors			1	\$2,500 \$700	\$25,000 \$150,000 \$2,500 \$4,200	
Advertising /Bidding / Misc. Expense Information Technology Zetron / Fire Communications TV Monitors Vehicle Exhaust Extraction	Large		1 1 6		\$25,000 \$150,000 \$2,500 \$4,200 \$40,000	nticipato Dar
Advertising /Bidding / Misc. Expense Information Technology Zetron / Fire Communications TV Monitors Vehicle Exhaust Extraction Fitness Equipment	Large		1 1 6 0	\$700	\$25,000 \$150,000 \$2,500 \$4,200 \$40,000 \$0 A	unticipate Dor
Advertising /Bidding / Misc. Expense Information Technology Zetron / Fire Communications TV Monitors Vehicle Exhaust Extraction Fitness Equipment Ice Maker	Large		1 1 6 0 1	\$700 \$2,000	\$25,000 \$150,000 \$4,200 \$40,000 \$0 A \$2,000	unticipate Dor
Advertising /Bidding / Misc. Expense Information Technology Zetron / Fire Communications TV Monitors Vehicle Exhaust Extraction Fitness Equipment Ice Maker PPE Extractor	Large		1 6 0 1 1	\$700 \$2,000 \$10,000	\$25,000 \$150,000 \$4,200 \$40,000 \$0 A \$2,000 \$10,000	unticipate Dor
Advertising /Bidding / Misc. Expense Information Technology Zetron / Fire Communications TV Monitors Vehicle Exhaust Extraction Fitness Equipment Ice Maker PPE Extractor PPE Dryer	Large		1 6 0 1 1 1	\$700 \$2,000 \$10,000 \$10,000	\$25,000 \$150,000 \$4,200 \$40,000 \$0 A \$2,000 \$10,000 \$10,000	
Advertising /Bidding / Misc. Expense Information Technology Zetron / Fire Communications TV Monitors Vehicle Exhaust Extraction Fitness Equipment Ice Maker PPE Extractor PPE Dryer Const. Testing Services	Large		1 6 0 1 1	\$700 \$2,000 \$10,000	\$25,000 \$150,000 \$4,200 \$40,000 \$0 A \$2,000 \$10,000 \$10,000 \$25,000	unticipate Dor
Advertising /Bidding / Misc. Expense Information Technology Zetron / Fire Communications TV Monitors Vehicle Exhaust Extraction Fitness Equipment Ice Maker PPE Extractor PPE Dryer Const. Testing Services Utility Tap Fees & Charges	Large		1 6 0 1 1 1	\$700 \$2,000 \$10,000 \$10,000	\$25,000 \$150,000 \$4,200 \$40,000 \$0 A \$2,000 \$10,000 \$10,000 \$25,000 \$10,000	
Advertising /Bidding / Misc. Expense Information Technology Zetron / Fire Communications TV Monitors Vehicle Exhaust Extraction Fitness Equipment Ice Maker PPE Extractor PPE Dryer Const. Testing Services Utility Tap Fees & Charges Utility Pole Relocation	Large		1 6 0 1 1 1	\$700 \$2,000 \$10,000 \$10,000	\$25,000 \$150,000 \$4,200 \$40,000 \$2,000 \$10,000 \$10,000 \$25,000 \$10,000 \$25,000	unticipate Dor
Advertising /Bidding / Misc. Expense Information Technology Zetron / Fire Communications TV Monitors Vehicle Exhaust Extraction Fitness Equipment Ice Maker PPE Extractor PPE Dryer Const. Testing Services Utility Tap Fees & Charges	Large		1 6 0 1 1 1	\$700 \$2,000 \$10,000 \$10,000	\$25,000 \$150,000 \$4,200 \$40,000 \$0 A \$2,000 \$10,000 \$10,000 \$25,000 \$10,000	
Advertising /Bidding / Misc. Expense Information Technology Zetron / Fire Communications TV Monitors Vehicle Exhaust Extraction Fitness Equipment Ice Maker PPE Extractor PPE Dryer Const. Testing Services Utility Tap Fees & Charges Utility Pole Relocation	Large		1 6 0 1 1 1	\$700 \$2,000 \$10,000 \$10,000	\$25,000 \$150,000 \$4,200 \$40,000 \$2,000 \$10,000 \$10,000 \$25,000 \$10,000 \$25,000	
Advertising /Bidding / Misc. Expense Information Technology Zetron / Fire Communications TV Monitors Vehicle Exhaust Extraction Fitness Equipment Ice Maker PPE Extractor PPE Dryer Const. Testing Services Utility Tap Fees & Charges Utility Pole Relocation	Large	GRA	1 6 0 1 1 1	\$700 \$2,000 \$10,000 \$10,000 \$25,000	\$25,000 \$150,000 \$4,200 \$40,000 \$0 A \$2,000 \$10,000 \$25,000 \$10,000 \$25,000 \$10,000 \$25,000 \$10,000 \$314,700	
Advertising /Bidding / Misc. Expense Information Technology Zetron / Fire Communications TV Monitors Vehicle Exhaust Extraction Fitness Equipment Ice Maker PPE Extractor PPE Dryer Const. Testing Services Utility Tap Fees & Charges Utility Pole Relocation	Large	GRA	1 6 0 1 1 1 1	\$700 \$2,000 \$10,000 \$10,000 \$25,000	\$25,000 \$150,000 \$4,200 \$40,000 \$0 A \$2,000 \$10,000 \$10,000 \$25,000 \$10,000 \$25,000 \$10,000	



Newburyport Committee on Budget & Finance

West End Fire Station

Project Cost Update & Approval



Major improvements required to provide adequate facilities at West End Fire Station



• Note extent of space

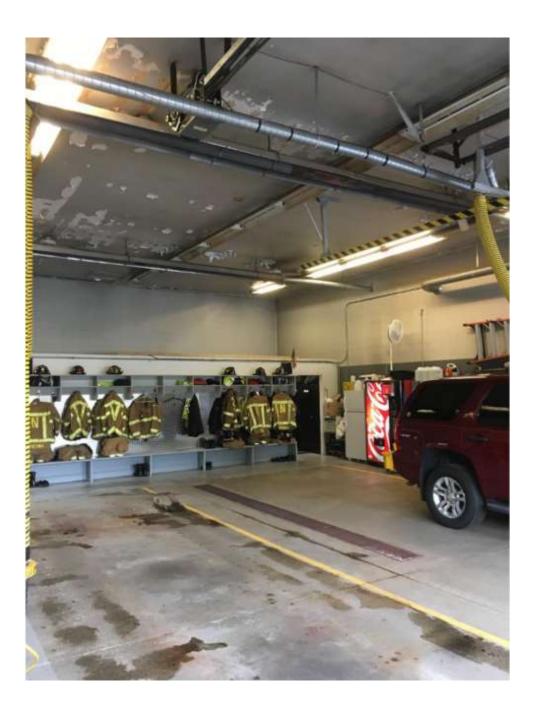
• Note minimal "screendoor" environmental separation with apparatus bay







• Cramped space in cell-like bedrooms, hallways, kitchen...

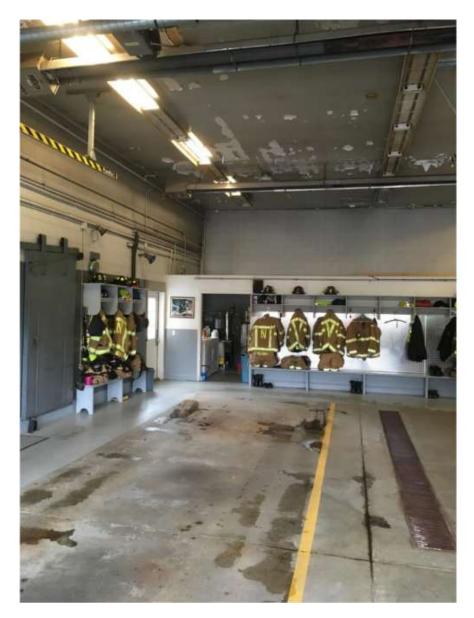


• No separate decontamination, equipment, and containment area

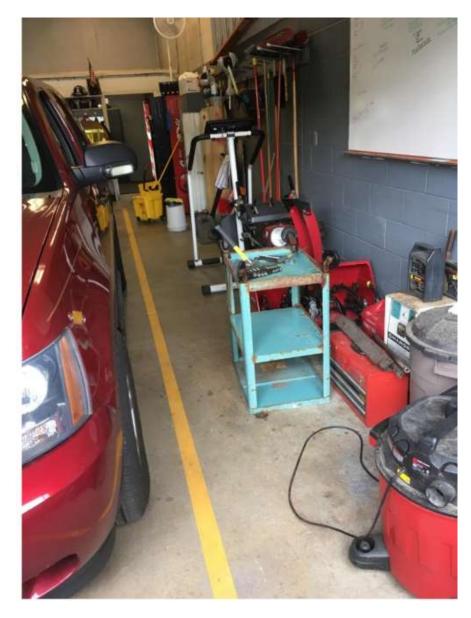
• Personal protective gear lacks ventilated and dark/enclosed space

• Personnel lockers not environmentally separated

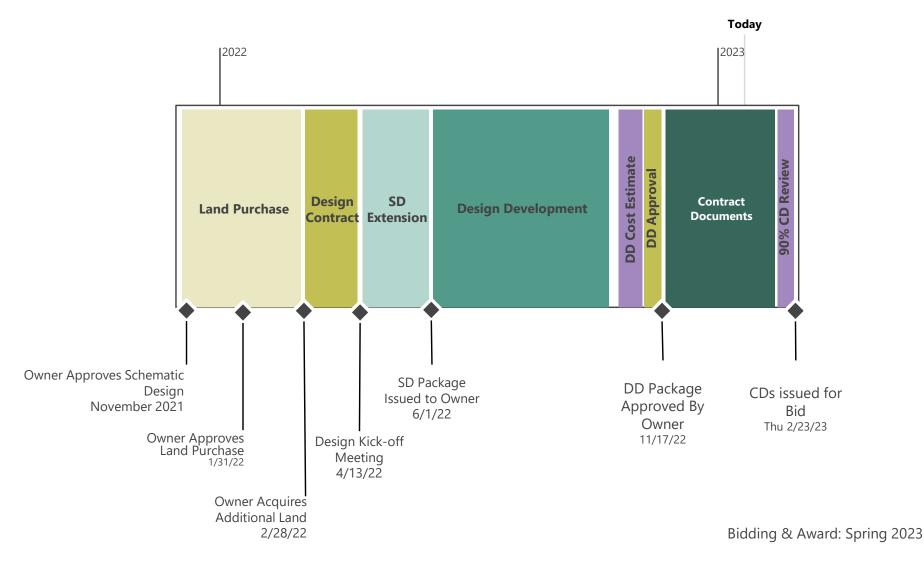
• Malfunctioning exhaust removal system







• Minimal storage space , etc.

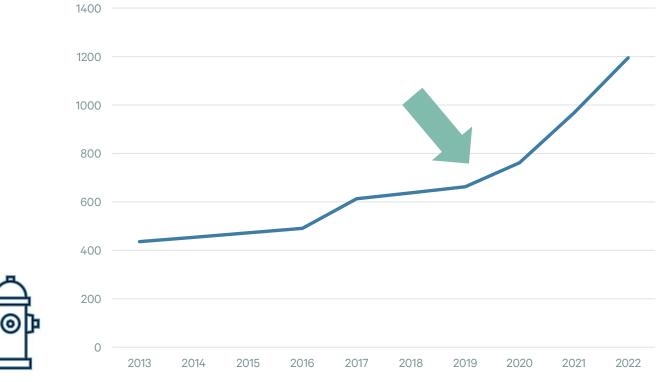


Construction: Summer 2023 – Summer 2024

Construction prices surge on account of pandemic shutdowns

- Factory Shutdowns
- Labor Shortages
- Port Closures
- War in Ukraine
- Increased Federal Aid
- Global Inflation

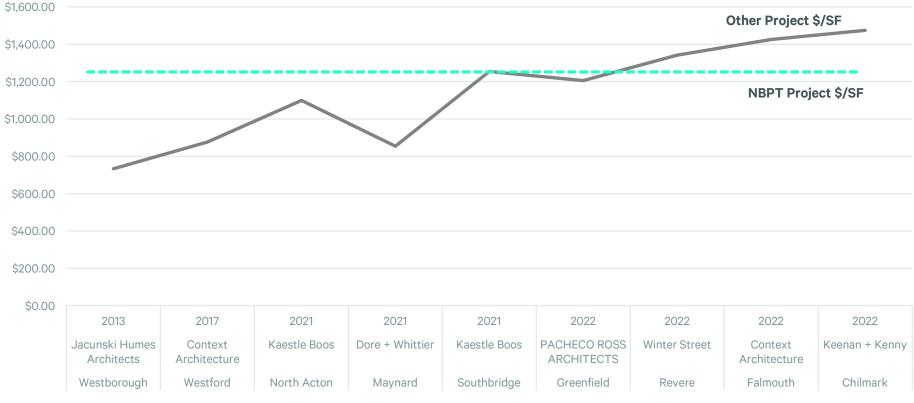
MA Fire Station Project Costs



Sources: Published Project Data

Fire Station Project Costs in 2023 USD

Fire Station Construction Prices - Inflation Adjusted (\$/SF)



2023 P\$/SF

Sources: Published Project Data (prjct \$ extrapolated from avg when unavailable)

Cost Factors

Mitigation Measures

REDUCED SOFT COSTS

- Reduced scope of project management & design related services
- More responsibilities assumed by City staff
- No temporary facilities
- Typical % Soft Cost = 33%, Nbpt % Soft Costs = 14%

Look Ahead

COST FACTORS

- Construction inflation costs predicted to continue to rise
- Cheapest time to build is now
- Project has already been scaled back to minimal requirements
- Delaying the project will add additional soft cost and further drive up the price



CITY OF NEWBURYPORT FY 2023 TRANSFER/APPROPRIATION REQ

Department of Public Services Department: Submitted by: Jamie Tuccolo, Acting Director Date Submitted: 1/9/2023

Transfer From:

Account Name:	Receipts Reserved for Appr. Fuel	Balance:	\$	144,364.20
Account Number:	2722-59600	Category:	\$	
Amount:	\$125,000.00	Trans I/O:	\$	-
Why Funds Are Available:			-	

This is the standard method of funding the DPS fuel and oil account. As City departments pay for gasoline, the funds are deposited into this reserve for appropriation account and then transferred into the fuel and oil expenditure account within the Highway budget to purchase more fuel.

Transfer To:

Account Name:	DPS Highway Fuel & Oil	Balance:	\$	(815.24)
Account Number:	01421004-54801	Category:	\$	100,255.96
Amount:	\$125,000.00	Trans I/O:	Ś	-
Why Funds Are Needed			-	

Funds are required to buy gasoline and oil that is used by City vehicles.

Sean R. Reardon, Mayor: Ethan R. Manning, Auditor: **City Council Action:**

Date: Date:

TRAN00145_01_09_2023



CITY OF NEWBURYPORT FY 2023

TRANSFER/APPROPRIATION REQUEST 3 PU 3: 15

Department:	Finance		
Submitted by:	Ethan R. Manning, Finance Director	Date Submitted:	1/9/2023
Transfer From: Account Name:	General Fund - Free Cash	Balance:	\$ 2,436,288.00
Account Number:	01-35910	Category:	n/a
Amount: Why Funds Are Av	\$10,741.00 ailable:	Trans I/O:	\$ (1,880,349.00)

The Massachusetts Department of Revenue certified Free Cash for FY2023 at \$4,316,637. These funds are available for any legal expenditure with the approval of the Mayor and a vote of the City Council.

Transfer To:

Account Name:	Essex North Shore Tech School	Balance:	\$	54,629.00
Account Number:	01398002-53202	Category:	\$	-
Amount:	\$10,741.00	Trans I/O:	\$	-
Why Funds Are Needed:			-	

Final tuition and transportation costs for the 2022-2023 school year came to \$130,741 compared to the \$120,000 that was assumed in the FY2023 budget. There are currently six students from Newburyport attending Essex North Shore Agricultural and Technical School.

Sean R. Reardon, Mayor:

Ethan R. Manning, Auditor:

City Council Action:

Date: Date:



IN CITY COUNCIL

ORDERED:

January 9, 2023

THAT the City Council of the City of Newburyport authorizes the payment of the following prior year bills in accordance with M.G.L. Chapter 44, Section 64:

Department	Vendor	Amount
DPS	Amesbury Industrial Supplies	\$671.59
DPS	Red's Restrooms	\$1,075.00
DPS	Brox Industries	\$625.95
DPS	Brox Industries	\$468.33
DPS	Rockingham Electrical	\$36.72
DPS	Daigle Enterprises	\$360.00
	Total:	\$3,237.59

Councillor Sharif I. Zeid

In City Council January 9, 2023:

Motion to collectively refer ORDR00404, ORDR00405, ORDR00406, ORDR00407, ORDR00408, ORDR00409, ORDR00411, and ORDR00412 to Budget and Finance with note that ORDR00409 will also be simultaneously referred to COTW by Councillor Zeid, seconded by Councillor Preston. So voted.



IN CITY COUNCIL

ORDERED:

December 12, 2022

THAT, The CITY COUNCIL of the City of Newburyport accepts with gratitude a gift from the Belleville Improvement Society for the purchase of loam at Atkinson Common valued at \$520. Said gift is accepted in accordance with MGL Chapter 44, Section 53A.

Councillor Sharif I. Zeid

In City Council December 12, 2022:

Councillor Wallace recused. Motion to refer collectively to Budget & Finance by Councillor Zeid, seconded by Councillor Preston. 10 yes, 1 recused (CW). So voted.



IN CITY COUNCIL

ORDERED:

December 12, 2022

THAT, the CITY COUNCIL of the City of Newburyport accepts with gratitude the following gifts from the Central Congregational Church to the Council on Aging department: 1) \$500.00 to be expended for the purpose of providing senior transportation and other senior needs and 2) \$2,000.00, derived from proceeds from the Annual Chocolate Tour, to be expended for the purpose of providing senior transportation. Said funds are accepted in accordance with M.G.L. Chapter 44, Section 53A.

Councillor Sharif I. Zeid

In City Council December 12, 2022: Motion to refer ORDR00400, ORDR00401, ORDR00403 collectively to Budget & Finance by Councillor Zeid, seconded by Councillor Lane. So voted.



IN CITY COUNCIL

ORDERED:

December 12, 2022

THAT, the CITY COUNCIL of the City of Newburyport accepts with gratitude a gift from The Mayor Gayden W. Morrill Charitable Foundation in the amount of \$110,000.00 to be expended in accordance with the foundation's funding directive dated November 15, 2022. Said funds are accepted in accordance with MGL Chapter 44, Section 53A.

FURTHER, THAT, the following unspent prior-year funds totaling \$69,050.00, at the request of the foundation, are hereby reallocated for the purpose of purchasing and installing granite coping around Bartlet Mall Frog Pond:

Org	Object	Description	Amount
29910006	58400	Atwood Park Interpretive Panels	\$1,050.00
29910014	58400	Cushing Park Improvements	\$15,000.00
29910019	58400	Irrigation Wells	\$53,000.00
Total			\$69,050.00

Councillor Sharif I. Zeid

In City Council December 12, 2022:

Motion to refer ORDR00400, ORDR00401, ORDR00403 collectively to Budget & Finance by Councillor Zeid, seconded by Councillor Lane. So voted.



IN CITY COUNCIL

ORDERED:

January 9, 2023

THAT, The CITY COUNCIL of the City of Newburyport accepts with gratitude the following gift:

- Donor: Friends of Newburyport Trees (FoNT)
- Amount: \$9,000.00

Purpose: Purchasing, planting and caring for city street streets at the recommendation of the Newburyport Tree Commission.

This gift is accepted in accordance with M.G.L. Chapter 44, Section 53A.

Councillor Sharif I. Zeid

In City Council January 9, 2023:



IN CITY COUNCIL

ORDERED:

January 9, 2023

THAT, The CITY COUNCIL of the City of Newburyport accepts with gratitude the following gift:

Donor: Kevin Hudson

Amount: \$500.00

Purpose: Support for SAGA (Sexuality and Gender Acceptance) events and programming occurring in or around Pride month (June) in the City of Newburyport.

This gift is accepted in accordance with M.G.L. Chapter 44, Section 53A.

Councillor Sharif I. Zeid

In City Council January 9, 2023:



IN CITY COUNCIL

ORDERED:

January 9, 2023

THAT, The CITY COUNCIL of the City of Newburyport accepts with gratitude the following gift:

- Donor: Charles & Olin Burkhart
- Item: 'Goldy' by Dale Rogers Sculpture
- Approximate Value: \$4,000.00
- Purpose: Sculpture to be placed in Patrick Tracy Square as approved by the Parks Commission.

This gift is accepted in accordance with M.G.L. Chapter 44, Section 53A¹/₂.

Councillor Sharif I. Zeid

In City Council January 9, 2023:



IN CITY COUNCIL

ORDERED:

January 9, 2023

THAT, The CITY COUNCIL of the City of Newburyport accepts with gratitude the following gift:

Donor: Charles & Olin Burkhart

Item: '3 Cardinals in a Tree' by Dale Rogers Sculpture

Approximate Value: \$6,000.00

Purpose: Sculpture to be placed in Patrick Tracy Square as approved by the Parks Commission.

This gift is accepted in accordance with M.G.L. Chapter 44, Section 53A¹/₂.

Councillor Sharif I. Zeid

In City Council January 9, 2023:



IN CITY COUNCIL

ORDERED:

January 9, 2023

WHEREAS, section 154 of the Fiscal Year 2023 state budget granted a 5 percent cost of living adjustment ("COLA") to state and teacher retirees on a \$13,000 base; and

WHEREAS, on November 16, 2022, the Governor signed Chapter 269 of the Acts of 2022 into law, providing local retirement systems with an option to increase the COLA for FY2023 to up to 5 percent on the base amount specified pursuant to G.L. c. 32, § 103; and

WHEREAS, section 2 of the act provides that a COLA increase pursuant to this act is retroactive to July 1, 2022 and any COLA increase, in addition to any COLA previously adopted for FY2023, will become part of the fixed amount of a retirees' retirement allowance in the same manner as all COLAs granted pursuant to section 103; and

WHEREAS, the local approval mechanism is different than traditional COLA increases and COLA base increases in that in order for a system to adopt a COLA increase pursuant to this act, the retirement board must vote for the increased amount, the mayor must recommend the increase to the city council and the council must vote in favor (by a majority vote); and

WHEREAS, the Newburyport Retirement Board voted unanimously on December 29, 2022 to increase the previously adopted COLA of 3 percent to 5 percent and Mayor Reardon now recommends approval by the City Council;

NOW, THEREFORE, BE IT ORDERED THAT, the CITY COUNCIL of the City of Newburyport, hereby votes to approve an increase to the FY2023 COLA from 3 percent to 5 percent. This increase shall be effective July 1, 2022 and applied on the \$12,000 base amount specified pursuant to G.L. c. 32, § 103.

Councillor Sharif I. Zeid

In City Council January 9, 2023:

Newburyport Retirement Board 16 Unicorn Street Newburyport, MA 01950

<u>Board Members</u> Joseph Spaulding, Chairman Jeffrey Cutter, Vice-Chairman Larry Giunta, Board Appointee Ethan Manning, City Auditor John Moak, Mayor Appointee Laurie Burton, Executive Director LaurieBurton@NewburyportRetirement.org Derek Minervini Assistant to the Executive Director DMinervini@NewburyportRetirement.org Telephone: (978)465-6619, FAX: (978)462-4042

January 5, 2023

Newburyport City Council 60 Pleasant Street Newburyport, MA 01950

To the Newburyport City Council,

M.G.L. c32 §103 authorizes retirement boards to approve cost of living adjustments (COLAs) of up to 3% to its retirees. The law requires any such adjustments to be calculated on a set portion of each retiree's benefit referred to as the COLA base. When the law went into effect in 1998 the COLA base for all retirement systems was set at \$12,000.

Section 19 of Chapter 188 of the Acts of 2010 added a mechanism for retirement boards to increase a system's COLA base; in the case of a city, the retirement board must vote to increase the COLA base, and the legislative body must approve the increase.

The Newburyport Retirement System is currently one of only eleven systems in Massachusetts that has not yet raised its COLA base from the \$12,000.

At its meeting on December 29, 2022, the Board voted to increase its COLA base to \$15,000, effective July 1, 2023 and adopted a new funding schedule which assumes the cost of this increase.

The Newburyport Retirement Board is requesting that the City Council vote to approve this COLA base increase.

Sincerely,

Joe mil

Joseph Spaulding Chairman Newburyport Retirement Board

 $\frac{1}{2}$

(c) If a schedule established under this section would result in an appropriation in the first fiscal year of the schedule that is greater than 8 per cent more than the appropriation in the previous fiscal year, the requirement of clause (2) of subsection (a) may be adjusted with the approval of the public employee retirement administration commission.

(d) Systems may establish a schedule under this section that provides for an increase in the maximum base amount on which the cost-of-living adjustment is calculated pursuant to section 103, in multiples of \$1,000. Acceptance of this subsection shall be in accordance with paragraph (j) of section 103.

SECTION 19. Section 103 of said chapter 32, as so appearing is hereby amended by adding the following paragraph: -

(i) Notwithstanding paragraph (a), the board of any system that establishes a schedule pursuant to section 22D or 22F, may increase the maximum base amount on which the cost-of-living adjustment is calculated, in multiples of \$1,000. Each increase in the maximum base amount shall be accepted by a majority vote of the board of such system, subject to the approval of the legislative body. For the purpose of this section, "legislative body" shall mean, in the case of a city, the city council in accordance with its charter, in the case of a town, the town meeting, in the case of a district, the district members, and, in the case of an authority, the governing body. In the case of a county or region, acceptance shall be by the county or regional retirement board advisory council at a meeting called for that purpose by the county or regional retirement board that shall notify council members at least 60 days before the meeting. Upon receiving notice, the treasurer of a town belonging to the county or regional retirement system shall make a presentation to the town's chief executive officer, as defined in paragraph (c) of subdivision (8) of section 22, regarding the impact of the increase in the cost-of-living adjustment base, the failure of which by a treasurer shall not impede or otherwise nullify the vote by the advisory council. Acceptance of an increase in the maximum base amount shall be deemed to have occurred upon the filing of the certification of such vote with the commission. A decision to accept an increase in the maximum base amount may not be revoked.

SECTION 71. The first actuarial valuation to be conducted pursuant to the second paragraph of paragraph (f) of subdivision (3) of section 21 chapter 32 of the General Laws, as appearing in section 16, shall be completed by January 1, 2011, or by January 1 of the third year following the last actuarial valuation of the system, whichever first occurs.

p:\admin\kim\perac # 33-10 attachment.doc



IN CITY COUNCIL

ORDERED:

January 9, 2023

THAT, the CITY COUNCIL of the City of Newburyport, at the recommendation of the Newburyport Retirement Board, hereby votes to approve an increase to the cost of living adjustment ("COLA") retirement benefit base from \$12,000 to \$15,000 effective July 1, 2023.

Councillor Sharif I. Zeid

In City Council January 9, 2023:

Committee Items – January 30, 2023

General Government

In Committee:

• ODNC00134_01_09_2023

Amend to Municipal Fees Schedule Passport Photos



ORDERED:

IN CITY COUNCIL

January 9, 2023

AN ORDINANCE TO AMEND APPENDIX B – MUNICIPAL FEE SCHEDULE

 $\begin{array}{l} \mbox{Appendix } B-M \mbox{Unicipal Fee Schedule} \\ \mbox{Section } 2-M \mbox{Unicipal Fees by Category} \end{array}$

Be it ordained by the City Council of the City of Newburyport as follows:

THAT Appendix B of the Code of Ordinances, City of Newburyport, Massachusetts, is hereby amended to read as follows, with *deletions double-stricken and in italicized*, and additions *double-underlined and italicized*:

SECTION 2-D CITY CLERK (VITAL RECORDS AND CERTIFICATIONS)

Vital Records and Certificates	Fee
Birth, Marriage and Death Certified Copies	\$10
Purchased by Mail	\$12
Marriage Licenses	\$30
Business Certificates	\$35
Passport Processing	\$35 (By Federal)
Passport Photos	<u>\$10</u> <u>\$15</u>

Councillor James J. McCauley

In City Council January 9, 2023:

Motion to refer to General Government by Councillor McCauley, seconded by Councillor Preston. So voted.

Committee Items – January 30, 2023

Licenses & Permits

In Committee:

- APPL00119_01_09_2023 2nd Hand Motor Vehicle License LCA Motors
- APPL00120_01_09_2023 2nd Hand Motor Vehicle License Plum Autoworks

APPL00119_01_09_2023 LATE FILE THE COMMONWEALTH OF MASSACHUSETTS RECEIVED CITY CLERK'S OFFICE __ OF _____ NEWBURYPORT, MA 2023 JAN -5 P 12: 53 **APPLICATION FOR A LICENSE TO BUY, SELL, EXCHANGE OR ASSEMBLE SECOND HAND MOTOR VEHICLES OR PARTS THEREOF** I, the undersigned, duly authorized by the concern herein mentioned, hereby apply for a class license, to Buy, Sell, Exchange or Assemble second hand motor vehicles or parts thereof, in accordance with the provisions of Chapter 140 of the General Laws. 1. What is the name of the concern? <u>LCA</u> Motors Business address of concern. No. 4 Lt. Leary Drive St., Newburyport _____ City — Town. 3. If an individual, state full name and residential address. Charles J. Ciovacco 4 Lt. Leary Drive Newbury port 4. If a co-partnership, state full names and residential addresses of the persons composing it. 5. If an association or a corporation, state full names and residential addresses of the principal officers. President ____ Secretary ____ Treasurer ____ 6. Are you engaged principally in the business of buying, selling or exchanging motor vehicles? If so, is your principal business the sale of new motor vehicles? $M \sigma$ Is your principal business the buying and selling of second hand motor vehicles? $\frac{\sqrt{2S}}{\sqrt{2S}}$ _____ Is your principal business that of a motor vehicle junk dealer? $\underline{\mathcal{NO}}$

7. Give a complete description of all the premises to be used for the purpose of carrying on the business. home based husiness Transactions 15 AII completed online. No vehic are stored an premises NO 8. Are you a recognized agent of a motor vehicle manufacturer? (Yes or No) If so, state name of manufactuer ____ 9. Have you a signed contract as required by Section 58, Class 1? (Yes or No) 10. Have you ever applied for a license to deal in second hand motor vehicles or parts thereof? (Yes or No) If so, in what city - town Newburyport For what year? 2005 to present Did you receive a license? _ (Yes or No) 11. Has any license issued to you in Massachusetts or any other state to deal in motor vehicles or parts thereof 10 ever been suspended or revoked? _____ Sign your name in full (Dy authorized to represent the concern herein mentioned) Nhot. Residence 4 H. Leary Drive

IMPORTANT

EVERY QUESTION MUST BE ANSWERED WITH FULL INFORMATION, AND FALSE STATEMENTS HEREIN MAY RESULT IN THE REJECTION OF YOUR APPLICATION OR THE SUBSEQUENT REVOCATION OF YOUR LICENSE IF ISSUED.

NOTE: If the applicant has not held a license in the year prior to this application, he must file a duplicate of the application with the registrar. (See Sec. 59)

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APPLICANT WILL NOT FILL THE FOLLOWING BLANKS

	Application after i	investigation	(Approved or Disapproved)
License No.	granted	20	Fee \$
	Signed		
A de	с.		
*			

CHAPTER 140 OF THE GENERAL LAWS, TER. ED., WITH AMENDMENTS THERETO (EXTRACT)

SECTION 57. No person, except one whose principal business is the manufacture and sale of new motor vehicles but who incidentally acquires and sells second hand vehicles, or a person whose principal business is financing the purchase of or insuring motor vehicles but who incidentally acquires and sells second hand vehicles, shall engage in the business of buying, selling, exchanging or assembling second hand motor vehicles or parts thereof without securing a license as provided in section fifty-nine. This section shall apply to any person engaged in the business of conducting auctions for the sale of motor vehicles.

SECTION 58. Licenses granted under the following section shall be classified as follows:

Class 1. Any person who is a recognized agent of a motor vehicle manufacturer or a seller of motor vehicles made by such manufacturer whose authority to sell the same is created by a written contract with such manufacturer or with some person authorized in writing by such manufacturer to enter into such contract, and whose prinicpal business is the sale of new motor vehicles, the purchase and sale of second hand motor vehicles being incidental or secondary thereto, may be granted an agent's or a seller's license; provided, that with respect to second hand motor vehicles purchased for the purpose of sale or exchange and not taken in trade for new motor vehicles, such dealer shall be subject to all provisions of this chapter and of rules and regulations made in accordance therewith applicable to holders of licenses of class 2.

Class 2. Any person whose principal business is the buying or selling of second hand motor vehicles may be granted a used car dealer's license.

Class 3. Any person whose principal business is the buying of second hand motor vehicles for the purpose of remodeling, taking apart or rebuilding the same, or the buying or selling of parts of second hand motor vehicles or tires, or the assembling of second hand motor vehicle parts, may be granted a motor vehicle junk license.

SECTION 59. The police commissioner in Boston and the licensing authorities in other cities and towns may grant licenses under this section which will expire on January first following the date of issue unless sooner revoked. The fees for the licenses shall be fixed by the licensing board or officer, but in no case shall exceed \$100. dollars. Application for license shall be made in such form as shall be approved by the registrar of motor vehicles, in sections fifty-nine to sixty-six, inclusive, called the registrar. No such license shall be granted unless the licensing board or officer is satisfied from an investigation of the facts stated in the application and any other information which they may require of the applicant, that he is a proper person to engage in the business specified in section fifty-eight in the classifications for which he has applied, that said business is or will be his principal business, and that he has available a place of business suitable for the purpose. The license shall be granted at any time by the licensing board or officer in writing, a copy of which shall be attached to the license, . Cities and towns by ordinance or by-law may regulate the situation of the premises of licensees within class 3 as defined in section fifty-eight, and all licenses and permits issued hereunder to a person within said class 3 shall be subject to the provisions of ordinances and by-laws which are hereby authorized to be made. No license or permit shall be issued hereunder to a person within said class 3 shall be to be exercised. All licenses granted under this section shall be revoked by the licensing board or officer that a license is not complying with sections fifty-seven to sixty-nine, inclusive, or the rules and regulations made thereunder; and no new license shall be granted to such person for use on the same premises, without the approval of the licensing board or officer refusing to grant, or revoking a license for any cause may, whith the days after such aprox for use on the same is not so

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APPLICATION FOR A LICENSE TO BUY, SELL, EXCHANGE OR ASSEMBLE SECOND HAND MOTOR VEHICLES OR PARTS THEREOF.

APPLICANT WILL NOT FILL THE FOLLOWING BLANKS

Application No.

License No.			
Class Licens	Name	Date Issued	

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·, FORM 53 HOBBS & WARREN

Western Surety Company

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS:

That WESTERN SURETY COMPANY, a corporation organized and existing under the laws of the State of South Dakota, and authorized and licensed to do business in the States of Alabama, Alaska, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, District of Columbia, Florida, Georgia, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin, Wyoming, and the United States of America, does hereby make, constitute and appoint

Paul T. Bruffat	
State of South Dakota Of Sioux Falls	
as Attorney-in-Fact, with full power and authority berefy and support of the sector of	

authority hereby conferred upon him to sign, execute, acknowledge and deliver for and on its behalf as Surety and as its act and deed, all of the following classes of documents to-wit:

Indemnity, Surety and Undertakings that may be desired by contract, or may be given in any action or proceeding in any court of law or equity, policies indemnifying employers against loss or damage caused by the misconduct of their amployees; official, bail, and suraty and fidelity bonds fidemnity in all cases where indemnity may be lawfully given; and with full power and authority to execute consents and waivers composity or charge or extend any bond or documant executed for this Company, and to compromise and settle any and all claims or

depends made or axisting against seid Company. Western Surety Company further certifies that the following is a true and exact copy of Section 7 of the by-laws of Western Surety

Company duly adopted and now in force, to-wit: Section % All boards, policies, undertakings, Powers of Attorney, or other obligations of the corporation shall be executed in the corporate name of the Company by the President, Secretary, any Assistant Secretary, Treasurer, or any Vice President, or by such other officers as the Board of Directors may authorize. The President, any Vice President, Secretary, any Assistant Secretary, any Assistant Secretary, or the Treasurer may appoint Attomeys-in-Fact or agents who shall have authority to issue bonds, policies, or undertakings in the name of the Company. The corporate seal is not necessary for the validity of any bonds, policies, undertakings, Powers of Attorney or other obligations of the corporation. The signature of any such officer and the corporate seal may be printed by facsimile.

In Witness Whereof, the said WESTERN SURETY COMPANY has caused these presents to be executed by its Senior Vice President ____ with the corporate seal affixed this 9th _____ day of _____

ATTEST Meloon Assistant Secretary

SURETY OMPANY

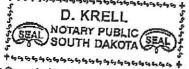
STATE OF SOUTH DAKOTA COUNTY OF MINNEHAHA

Paul T. Bruflat, Senior Vice President

2005

On this <u>9th</u> day of June, <u>2005</u>, before me, a Notary Public, personally appeared Paul T, Bruflat _____, and _____, L. Nelson

who, being by me duly sworn, acknowledged that they signed the above Power of Attorney as _____ Senior Vice President and Assistant Secretary, respectively, of the said WESTERN SURETY COMPANY, and acknowledged said instrument to be



Al Frell Notary Public

My Commission Expires November 30, 2006 Form F1975-4-2002

Based upon the wording contained in the Bond az stated in paragraph #4, the 5_ Registrar is satisfied that the above identified Western Surety Second Hand Mator Vehicle Dealer Bond (F6333-7-2003) provides continuous coverage under the law (unless the municipality is notified of cancellation). As such, a municipality in Massachusetts that is processing a renewal for a Class 2 Dealer License from a dealer who has a Wastern Sundy Second Hand Motor Vehick Desler Bond (F6333-7-2003) on file with the numicipality, should not require additional evidence that the bond is still valid.

6, I trust this is responsive to your inquiry. .

> •

Very truly yours William E. MaVey Deputy General Counsel

william.movey@state.ma.us

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The Commonwealth of Massachusetts

Registry of Motor Vehicles One Copley Place, Boston 02116

25. Jan 08 10-58/

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Kimberty Hinden Regentesie

FO. But 199100 FO. But 199100 featur MA 42110-0148 www.ant.com/row

November 19, 2004

Jennifer B. Schaller, fisq. Law Department CNA Suraty, 13th Floor CNA Plaza 13 South Chicago, II. 60685

Re: Western Surety Company Bond for Massachusetts

Dear Attomey Schaller:

1. This is in response to you inquiry concerning the bond required by Class 2 motor vehicle dealers in Massachusetts. You have indicated that licensing authorities in zome municipalities have insisted that dealers attempting to renew a " Class 2 Dealer's License" must provide proof that the dealer's existing bond is still valid and will remain so throughout the renewal term of one calendar year (January 1, to December 31).

Chapter 422 of the Acts of 2002 does state that:

A municipal licensing authority shall not issue or renew a Class 2 license unless it is satisfied that a hand or equivalent proof of financial responsibility meeting the requirements of this section is in effect during the term under which the license

. shall be issued or renewed

3. I have reviewed a copy of a bond you have provided which is issued by Western Surety Company (apparently a related company to CNA). The Form Number of the Western Surety Second Hand Motor Vehicle Dealer Bond is F6333-7-2003 and you have provided oral assurance that this is the only bond form used in Massachusetts by Western Surety Company for Class 2 dealers.

 The last paragraph of the Western Surety Second Hand Motor Vehicle Dealer Bond states:

This bond shall be continuous and may be cancelled by the Sutety by giving thirty (30) days written notice of cancellation to the municipal licensing authority at ______ by First Class U.S. Mail.

CNA SURETY

CNA Plaza, Chicago IL 60685-0001

Jennifer B. Schaller Counsel Telephone 312-822-7049 Faczimile 312-755-3737

Re: Second Hand Motor Vehicle Dealer Bond Certificate of Continuance for Western Surety Bonds

Western Surety is an underwriting company of CNA Surety and we are contacting your office because several of our bond principals received correspondence indicating the need for a Certificate of Continuance for their Second Hand Motor Vehicle Dealer Bonds issued by Western Surety.

Western Surety's standard bond form expressly states: "This bond shall be <u>continuous</u> and may be cancelled by the Surety by giving (30) days' written notice of cancellation to the municipal licensing authority at (address) by First Class Mail." (emphasis added)." Since, Western Surety's bond form is continuous, it would be inappropriate for Western Surety to issue a Continuation Certificate.

The Commonwealth of Massachusetts, Registry of Motor Vehicles has reviewed Western Surety's bond form and has clearly stated that municipalities do not need to require additional evidence that the bond is in effect. (See attached letter from Attorney William McVey dated November 19, 2004).

If you have any questions, or we can be of any further assistance, please feel free to contact me at (312) \$22-7049.

Sincerely,

Jennifer B. Schaller

Jennifer B. Schaller

APPL00120_01_09_2023 THE COMMONWEALTH OF MASSACHUSETTS THE COMMONWEALTH OF MASSACHUSETTS CITY CLERK'S OFFICE NEWBURYPORT, MA
NEWBURYPORT. MA 2023 JAN -5 P 4: 11 APPLICATION FOR A LICENSE TO BUY, SELL, EXCHANGE
OR ASSEMBLE SECOND HAND MOTOR VEHICLES
OR PARTS THEREOF
I, the undersigned, duly authorized by the concern herein mentioned, hereby apply for a
Business address of concern. No. <u>71 Storey Ave</u> St., <u>Newbury port MA 01950</u> City – Town.
2. Is the above concern an individual, co-partnership, an association or a corporation? <u>Corp.</u>
3. If an individual, state full name and residential address. $\sim M$
4. If a co-partnership, state full names and residential addresses of the persons composing it.
the state and the second of th
5. If an association or a corporation, state full names and residential addresses of the principal officers. President <u>NAncy London II Warventon Rol Howerhill MA 01833</u> Secretary <u>u</u> <u>u</u>
Treasurer 10
6. Are you engaged principally in the business of buying, selling or exchanging motor vehicles? $\underline{4}\underline{<}\underline{S}$
If so, is your principal business the sale of new motor vehicles? <u>No</u>
Is your principal business the buying and selling of second hand motor vehicles? $\underline{\gamma cs}$
Is your principal business that of a motor vehicle junk dealer? No

7. Give a complete description of all the premises to be used for the purpose of carrying on the business.

Approx 100 Ft Frontage Located at 71 Storey the Newberryport MA Building Approx 20×60 Consisting of offices 8. Are you a recognized agent of a motor vehicle manufacturer? M_{α} (Yes or No) If so, state name of manufactuer _ Have you a signed contract as required by Section 58, Class 1? N_6 9. (Yes or No) Have you ever applied for a license to deal in second hand motor vehicles or parts thereof? 10. Ves (Yes or No) Newburyport MA. If so, in what city - town ____ For what year? Past 15 yrs Did you receive a license? ____ Ves (Yes or No) 11. Has any license issued to you in Massachusetts or any other state to deal in motor vehicles or parts thereof ever been suspended or revoked? _____ No (Yes or No) Sign your name in full G.M. un (Dyly authorized to represent the concern herein mentioned) Huerhill MA 0183. Residence II WAvven 00

IMPORTANT

EVERY QUESTION MUST BE ANSWERED WITH FULL INFORMATION, AND FALSE STATEMENTS HEREIN MAY RESULT IN THE REJECTION OF YOUR APPLICATION OR THE SUBSEQUENT REVOCATION OF YOUR LICENSE IF ISSUED.

NOTE: If the applicant has not held a license in the year prior to this application, he must file a duplicate of the application with the registrar. (See Sec. 59)

APPLICANT WILL NOT FILL THE FOLLOWING BLANKS

	Application after inves	tigation
		(Approved or Disapproved)
License No	granted	Fee \$
	Signed	

CHAPTER 140 OF THE GENERAL LAWS, TER. ED., WITH AMENDMENTS THERETO (EXTRACT)

SECTION 57. No person, except one whose principal business is the manufacture and sale of new motor vehicles but who incidentally acquires and sells second hand vehicles, or a person whose principal business is financing the purchase of or insuring motor vehicles but who incidentally acquires and sells second hand vehicles, shall engage in the business of buying, selling, exchanging or assembling second hand motor vehicles or parts thereof without securing a license as provided in section fifty-nine. This section shall apply to any person engaged in the business of conducting auctions for the sale of motor vehicles.

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Class 1. Any person who is a recognized agent of a motor vehicle manufacturer or a seller of motor vehicles made by such manufacturer whose authority to sell the same is created by a written contract with such manufacturer or with some person authorized in writing by such manufacturer to enter into such contract, and whose prinicpal business is the sale of new motor vehicles, the purchase and sale of second hand motor vehicles being incidental or secondary thereto, may be granted an agent's or a seller's license; provided, that with respect to second hand motor vehicles purchased for the purpose of sale or exchange and not taken in trade for new motor vehicles, such dealer shall be subject to all provisions of this chapter and of rules and regulations made in accordance therewith applicable to holders of licenses of class 2.

Class 2. Any person whose principal business is the buying or selling of second hand motor vehicles may be granted a used car dealer's license.

Class 3. Any person whose principal business is the buying of second hand motor vehicles for the purpose of remodeling, taking apart or rebuilding the same, or the buying or selling of parts of second hand motor vehicles or tires, or the assembling of second hand motor vehicle parts, may be granted a motor vehicle junk license.

SECTION 59. The police commissioner in Boston and the licensing authorities in other cities and towns may grant licenses under this section which will expire on January first following the date of issue unless sooner revoked. The fees for the licenses shall be fixed by the licensing board or officer, but in no case shall exceed \$100. dollars. Application for license shall be made in such form as shall be approved by the registrar of motor vehicles, in sections fifty-nine to sixty-six, inclusive, called the registrar, and if the applicant has not held a license in the year prior to such application, such application shall be made in duplicate, which duplicate shall be filed with the registrar. No such license shall be granted unless the licensing board or officer is satisfied from an investigation of the facts stated in the application and any other information which they may require of the applicant, that he is a proper person to engage in the business specified in section fifty-eight in the classifications for which he has applied, that said business is or will be his principal business, and that he has available a place of business suitable for the purpose. The license shall specify all the premises to be occupied by the licensing board or officer in writing, a copy of which shall be attached to the license. Cities and towns by ordinance or by-law may regulate the situation of the premises of licensees within class 3 as defined in section fifty-eight, and all licenses and permits issued hereunder to persons within said class 3 shall be subject to the hearing, of which seven days' notice shall have been given to the owners of property abuting on the premises where such license is not complying with sections fifty-seven to sixty-ine, inclusive, or the rules and regulations made thereunder; and no new license shall be granted to such person thereafter, nor to any person for use on the same premises, without the approval of the registrar. The hearing board or officer refusing to grant, or revoking a license for a

FORM 53 HOBBS & WARREN, INC., PUBLISHERS · REVISED

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MAY 1 8 2004 夏夏夏1 漢 夏

Memorandum

To:	Municipal Licensing Authorities of Motor Vehicle Dealers
From:	William E. McVey, Deputy General Counsel
Date:	May 2004
Re:	Issues Relating to Class 2 Dealers under G.L. 140, Section 58

1. <u>Purpose</u>

The primary purpose of this Memorandum is to provide information to Cities and Towns about the amendments relative to Class 2 dealers that were made to G.L. c. 140, §58 by Chapter 422 of the Acts of 2002 (a copy of which is enclosed). The Legislature amended Section 58 to require Class 2 dealers to post and maintain a bond (or, if permitted, equivalent proof of financial responsibility, e.g., certificate of deposit or letter of credit) with the municipal licensing authority in the amount of \$25,000. The amendments also authorize the licensing of two additional types of businesses engaged in used vehicle sales. The amendment became effective almost a year ago, on March 24, 2003, but some municipalities may be unaware of it and some other issues remain to be clarified.

2. Bond Requirement

The bond requirement is <u>only applicable to Class 2 dealers</u>. It is not applicable to a Class 1 dealer who buys and sells used vehicles and it is not applicable to a Class 3 dealer who sells used vehicles. The bond is for the benefit of a person who purchases a vehicle from the Class 2 licensee and suffers a financial loss. The list of intended beneficiaries is contained within the Act. The bonding requirement modifies the municipal licensing process for Class 2 dealers (and affects the dealer's ability to retain the license). It also affects the RMV, since the agency is prohibited from knowingly issuing or renewing Dealer Plates if it becomes aware that a Class 2 dealer lacks the legally required bond. The RMV will revoke the General Registration and Dealer Plates when it becomes aware the dealer does not have a bond or when it is informed by a municipality that it has revoked a Class 2 license. The RMV has become aware that some municipalities are not enforcing the bond requirement and have been licensing Class 2 dealers without a bond. <u>A municipality that fails to enforce the bond requirement faces potential liability from claimants under the bond.</u>

3. Dealers Subject to Bond Requirement

All Class 2 dealer-licensees (no exceptions) renewing or obtaining a new license in 2004 (and in future years) are subject to the bonding requirement of \$25,000. This is true even if the dealer is not selling vehicles covered by the warranty requirements of G.L. c.90, §7N ¼. G.L. c.140, §58 (c)(1) states:

The person shall obtain a bond, or equivalent proof of financial responsibility as described in paragraph (5), and continue in effect a surety bond or other equivalent proof of financial responsibility satisfactory to the municipal licensing authority in the amount of \$25,000 executed by a surety company authorized by the insurance department to transact business in the commonwealth.

The law prohibits a city or town licensing authority from issuing or renewing a Class 2 license unless it is satisfied that a bond or the equivalent meeting the requirements of the law is in effect during the term under which the license shall be issued or renewed. Note also that if a dealer has more than one location in a City or Town and goes by a different name at the other location(s), the dealer needs a separate bond for each location

at which it uses a different name. If a dealer has locations in more than one City or Town, separate bonds must be obtained for each municipality.

4. Bond Issue Clarifications

Two issues needing clarification have recently been raised as to the bond/equivalent requirement.

(a) Certificates of Deposit and Letters of Credit: The first has to do with the place where certificates of deposit or irrevocable letters of credit may be deposited. Section 58 (c)(1) states, in part:

- In lieu of the bond required by this section, the municipal licensing authority may allow the dealer to deposit collateral in the form of a certificate of deposit or irrevocable letter of credit, as authorized by the banking laws of the commonwealth.... The collateral may be deposited with or executed through
- any authorized state depository designated by the commissioner....

The statute does not define "authorized state depository" but the Massachusetts Commissioner of Banks has issued an opinion to the Registrar, dated March 5, 2004, stating that "the definition covers any state or federally chartered bank or credit union with a banking office in the Commonwealth which has federal deposit insurance." The Commissioner has recommended that if a "Certificate of Deposit" is used, it should be titled:

"Commonwealth of Massachusetts, name of municipality, In Trust for (dealer) under Massachusetts General Laws chapter 140, section 58"

The Commissioner also recommends that an assignment should be executed, and that a municipality wishing to do so should contact the State Treasurer's Office to discuss the mechanics of that option. The Treasurer's Office is familiar with Certificates of Deposit and other alternative collateral since that office holds such collateral for certain licensees of the Commissioner of Banks.

(b) Filing the Bond with Licensing Authorities: The second issue relates to the manner in which the bond should be filed and filled out. The original of the bond needs to be filed with the City or Town when an initial Class 2 license is issued. On renewal, the licensing authority should insist on either a new original bond with power of attorney attached or an original continuation certificate showing that the existing bond is vali through the end of the next license period. Bonds may be written for more than one year so a municipality should be sure the bond covers the whole period during which the Class 2 license will be in effect. The amended statute does not specify the manner in which the bond should be filled out. However, a bond should clearly identify the parties and the purpose of the bond. For example:

Town of Willingboro, as obligee for the benefit of a person who purchases a vehicle from (name of dealer) and suffers a loss as defined by G.L. 140, Section 58.

5. Class 2 Licensee Definition Expanded

The definition of a Class 2 dealer was expanded to include two additional categories of used vehicle sellers that were not previously required to obtain a Class 2 license. A Class 2 licensee had always been defined as a person whose principal business is the buying or selling of second hand motor vehicles. The amended law allows a license to be issued even though it is not the applicant's principal business or he/she is not actually a seller. G.L. c. 140, §58 (c) now reads, in part:

(c) Class 2. A person whose principal business is the buying or selling of second hand motor vehicles, a person who purchases and displays second hand motor vehicles for resale in retail transactions, and any other person who displays second hand motor vehicles not owned by him pursuant to an agreement in which he receives compensation, whether solely for displaying the vehicles, upon the sale of each vehicle, or otherwise, may be granted a used car dealer's license

6. Comment on the Expanded Definition of Class 2 Licensee

(i) "...a person who purchases and displays second hand motor vehicles for resale in retail transactions." This seller is a dealer of motor vehicles at retail even though it may not be his/her principal business and buys vehicles in order to sell them at retail to make a profit. A person who is selling or negotiating the casual sale of his/her own vehicle (one registered to him/her or to a spouse, another relative, a friend, etc.) is not required to obtain a Class 2 license, in the view of the RMIV. Nor is a company that leases vehicles for the use of its employees and then allows the employee to purchase the vehicle at the expiration of the lease. This provision may be applicable to a local garage or other business that purchases vehicles at auction (or from other sources) and repairs or reconditions them and offers them for sale. Any vehicles this licensee sells to a consumer will be subject to the state-mandated warranty protection of G.L. c.90, §7N¼, and the dealer must maintain or demonstrate access to repair facilities sufficient to enable him/her to satisfy the warranty repair obligations imposed by that section. The licensee must comply with the Consumer Protection Act, G.L. 93A and the Regulations of the Attorney General, and must post the required warranty notices on vehicles offered for sale. As a Class 2 licensee, this dealer is also required to maintain a Used Vehicle Record Book pursuant to G.L. 140, §62. The "authorized officers" identified in G.L. c.140, §66 (State Police, Attorney General, Chief of Police, Police Commissioner in Boston, the Selectmen of a Town, or police officers authorized by said officials) "may at any time enter upon any premises used by any person licensed under section fifty-nine for the purpose of carrying on his licensed business, ascertain how he conducts the same and examine all second hand motor vehicles or parts thereof kept or stored in or upon the premises, and all books, papers and inventories relating thereto."

(ii) "... any other person who displays second hand motor vehicles not owned by him pursuant to an agreement in which he receives compensation, whether solely for displaying the vehicles, upon the sale of each vehicle, or otherwise." This is a person who does not own the vehicles he displays on his property but he receives compensation for the display or the sale from the vehicle's owner. These are usually consignment sales and they should only involve privately owned vehicles. RMV regulations prohibit the holder of a dealer plate from offering vehicles for sale anywhere other than the licensed premises of the dealer (except for sales at recognized automobile auction facilities or at combineddealer special sale events). Therefore, a dealer who has been issued Dealer Plates may not display other dealer's vehicles on his/her own lot or display his own vehicles on other dealers' lots. However, any licensed Class 2 dealer who has received Dealer Plates from the RMV may display vehicles for sale on the dealer's lot that are owned by a private party and held for consignment, but the vehicle must be entered in the dealer's Used Vehicle Record Book as a consignment vehicle. (The dealer cannot, however, attach its own Dealer Plate to allow a test drive of the consigned vehicle because the dealer does not own the vehicle. If a test drive is contemplated, the vehicle's owner may opt to leave his/her own valid registration plates on the vehicle if the owner's liability insurance will cover a test drive). The record keeping and inspection requirements as contained in 6.(i) (above) are applicable here also.

7. <u>Local Review Needed</u> Municipalities are urged to review the Class 2 licenses they have issued in 2004 to ensure that the bond requirement has been met for each license.

8. A Note About Licensees Working From Home

The RMV is aware that some municipalities have been issuing Class 2 licenses even though the applicant is doing business from his/her home. Class 2 licensees almost always apply to the RMV for Dealer Plates. The process is that the RMV asks the State Police to perform a site visit to determine if the dealer has a facility that is appropriate for the issuance of such plates. After the visit, the Trooper makes a report and recommendation to the RMV. If the licensed premises do not comply with the relevant provisions of G.L. c.90 and the Regulations of the Registrar at 540 CMR 18.00, the application for plates will be denied.

<u>Definition of "Dealer."</u> M.G.L. c. 90, 1, defines a "dealer" as: "any person who is engaged principally and substantially in the business of buying, selling or exchanging motor vehicles or trailers or motor vehicle bodies <u>who maintains a facility dedicated to carrying out said business</u>...." (Emphasis added). An applicant for General Registration Dealer Plates must be principally and substantially engaged in the business and have the required dedicated facility. Even a dealer who sells solely on a "wholesale basis" (although no such Class 2 license category exists) must have the required dedicated facility. The RMV will not issue Dealer Plates to an applicant if his/her business is located within the personal living quarters of a residential building, whether or not the dealer or someone else actually resides there or whether no one resides there. The law regarding the issuance of dealer plates is clear and plates will not be issued even if the municipality has issued a dealer's license for that location.

Further, the regulations at 540 CMR 18.02(2)(a) were adopted under the Registrar's authority and contain the requirements that a dealer must meet to receive or retain Dealer Plates. These requirements indicate the nature of the required "facility." Generally, the following are relevant to a used vehicle dealer:

The dealer's business is situated within a permanent building or permanently affixed structure, including an office trailer, owned or leased by the dealer for his exclusive use and located at the address of record noted on the dealer's license issued under the provisions of M.G.L. 140, §59. Except for a dealer who exchanges vehicles or trailers solely on a wholesale basis, the dealer shall be open to the public.

The building, structure or office trailer must have adequate office space to conduct the business.

If more than one business is located within the same building or structure, the dealer shall maintain a separate and exclusive entrance, unless the multiple businesses are owned or controlled by the same principals.

Subject to local law, and except for a dealer who exchanges vehicles or trailers solely on a wholesale basis, the dealer shall display a permanently affixed exterior sign of sufficient size and design, to give the general public notice of the name and nature of the business.

The dealer must have a display area/lot to display the vehicles being offered for sale unless the dealer exchanges vehicles or trailers solely on a wholesale basis.

9. Summary

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Personal living quarters cannot be the site of a Class 2 dealer's business because the law requires a dealer to maintain a facility dedicated to carrying out that business and that facility must be used exclusively for the dealer's business. It is possible that a dealer may have premises either attached to or detached from a residential building that could be deemed suitable by the RMV. The State Police site inspection may help to determine suitability. The premises would have to be separate and distinct from any personal living quarters (e.g., it would have to be a secure facility with solid floor-to-ceiling walls, adequate office space to conduct the business, direct access from the outside of the building, not be used or shared with any other person or with any portion of personal living quarters and be licensed by the municipality at that location). The licensee must post and maintain reasonable business hours so that State and local police can accomplish the required facility and record book checks when required.

10. <u>New License Application in Draft Stage</u> G.L. 140, §59 states, in part: ... "application for license shall be made in such form as shall be approved by the registrar of motor vehicles...." The RMV is drafting a proposed new version of an *Application for a License as a Motor Vehicle Dealer*. The purpose is to update and standardize the *Application* to include significantly more information about the applicant (including background information on all principals) so that licensing authorities are better informed before issuing or renewing a license. The RMV is willing to receive and discuss suggestions for the proposed new *Application* that local licensing officials may wish to provide. Please email me with your suggestions at: william.mcvey@state.ma.us or write to me at the above address.

Thank you. If you have any questions about this Memorandum you may email or write. You may also call me at: 617-351-9950.

226 LOWELL ST., SUITE B www.aadority.com		WILMINGTON, MA 01887 TELEPHONE (617) 523-2935 FAX (617) 523-1707 2/12/2022	BONDS - (everything except criminal)ProbateContractCourtFidelityLicensePublic OfficialPermitMisc. Bonds
7	Plum Auto Wo 71 Storey Ave Newburyport,		PAY ONLINE AT WWW.AADORITY.COM
All Inv	oices are due a	Returned Check will incur a \$30 Fee. nd payable as of the date of charge unless satisfactory can DESCRIPTION	When paying, please put Invoice Number on your check
	571402	MA Used Car Dealer	\$250.00
12/31/2022	371402	(\$25,000.00) 12/31/2022 - 12/31/2023 City of Newburyport, MA NGM Bond No. 148623 Renewal	
I I	Plum Auto W 71 Storey Ave Newburyport,	12/31/2022 - 12/31/2023 City of Newburyport, MA NGM Bond No. 148623 Renewal	A. DORITY COMPANY Thank You

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Issued Through:

A.A. Dority Company, Inc.

CONTINUATION CERTIFICATE

The <u>NGM Insurance Company</u>, hereinafter called the Company, hereby continues in force its <u>MA Used Car Dealer</u>, Bond Number <u>148623</u>

in the sum of **Twenty-Five Thousand dollars** (\$25,000.00)

on behalf of

Plum Auto Works, Inc.

located at

71 Storey Ave Newburyport, MA 01950

in favor of City of Newburyport, MA

for the term beginning **December 31, 2022** and ending on **December 31, 2023**, subject to all covenants and conditions of said bond.

This Continuation is executed upon the express condition that the Company's liability shall not be cumulative and shall be limited at all times by the amount of the penalty stated in the bond.

In witness whereof, the Company has caused this instrument to be signed by its duly authorized Attorney-in-Fact and its Corporate Seal to be hereto affixed this day, December 12, 2022

NGM Insurance Company By: Katie E. Connor Attorney-in-Fact Producer: A.A. Dority Company, Inc. 226 Lowell Street; Suite B-4 Wilmington, MA 01887 617-523-2935 Fax: 617-523-1707

Committee Items – January 30, 2023

Community Services

In Committee:

• APPT00367_01_09_2023

Lina Matta

7 Everett Dr. Board of Health

2/1/2026

APPT00367_01_09_2023



CITY OF NEWBURYPORT Office of the May2022 JAN -5 A 11:45 Sean R. Reardon, Mayor

60 Pleasant Street - P.O. Box 550 Newburyport, MA 01950 978-465-4413 phone mayor@cityofnewburyport.com

To: President and Members of the City Council

From: Sean R. Reardon, Mayor

Date: January 9, 2023

Subject: Appointment

I hereby appoint, subject to your approval, the following named individual as a member of the Board of Health. This term will expire on February 1, 2026.

Lina Matta, Pharm.D., MPH, BCPS 7 Everett Drive Newburyport, MA 01950

October 18, 2022

Newburyport City Hall, Office of the Mayor

Dear Mayor Reardon:

I am writing to share my strong interest in the upcoming open position on the Newburyport Board of Health.

At an early age, I was witness to the power of actions in public health. Some of my earliest childhood memories are that of my father setting out for long trips into foreign countries to help combat malaria, a scourge for many around the world. As I grew into young adulthood, I chose a career with the express desire to help others navigate the complexity that is medication management and with the clear understanding that medication errors and overprescribing are a public health danger to many in our country.

Several years after becoming a pharmacist, I decided to pursue a degree in public health, with my early childhood recollections being the impetus for that interest. After all, there is no other discipline focused entirely on preventing disease and improving health (traditional healthcare professionals focus on treating illnesses). My career has provided me with many opportunities to create and implement programs that are entirely focused on improving health and preventing illness. These include a hospital-wide flu vaccination program for our high-risk patients complicated by flu vaccine shortage, improvement of high cholesterol and high blood pressure in patients who are high risk of a future heart attack or stroke, development of a program that improves medication adherence and accurate medication prescribing, and growth of several other initiatives, such as emergency response programs, in a variety of hospital and clinic settings that are aimed at creating quality improvement changes.

My work has required extensive collaboration with world-renowned physicians, esteemed hospital leaders, exceptionally passionate nurses, and other essential and dedicated professionals, including respiratory therapists, dieticians, and information systems personnel. I have led teams through change and have been able to establish programs with minimal resources.

Newburyport is an extraordinary place and history tells us that this is a city with an inherent ability to create long-lasting impact. With the recent pandemic, the general population has become much more aware of the power of public health and the Board of Health is poised to lead the city through continued creation of health-related programs and initiatives. I hope to have an opportunity to speak with you further and am most grateful for your consideration.

Respectfully submitted,

Intata

Lina Matta, Pharm.D., MPH, BCPS

Lina Matta

7 Everett Drive, Newburyport, MA 01950

Expertise

Successfully leading teams during change Implementing cost containment efforts Extensive experience in clinical, project and people management

Education

Harvard School of Public Health Masters in Public Health- Management and Policy

Rutgers University College of Pharmacy Doctor of Pharmacy, Bachelor of Science

Leadership and Clinical Experience

Brigham and Women's Hospital Department of Pharmacy

Director of Ambulatory Pharmacy (25 indirect and direct reports)

Dec 2016-present This position seeks to build an ambulatory care service line that establishes gold-standard pharmacotherapy services in clinics and across populations. In this role, new to the hospital, the goal is to establish team building within current ambulatory infrastructure and identify areas of improvement, expand the role of ambulatory and transition of care pharmacists throughout the institution, and develop the breadth of services offered by the ambulatory pharmacy team to improve patient care outcomes.

Director of PGY2-Cardiology Pharmacy Residency Program (2-3 direct reports)

This position required implementation of, and subsequent growth of a program focused on training highly capable and motivated pharmacists in the area of cardiac pharmacotherapy with oversight throughout program's first accreditation process.

Clinical Pharmacy Practice Manager (20-25 direct reports)

The focus of this pioneer position was to establish and lead a strong departmental clinical practice model. As the role evolved, it required an ability to apply creative solutions to patient care challenges, to build and integrate efforts across hospital multidisciplinary teams, to thrive under increasing cost-containment pressures, and to lead highly visible institutional quality improvement programs.

Transitions of Care Residency Director (2 direct reports)

This was a time-limited role that required orchestration of a collaborative care redesign project between the pharmacy and cardiology departments that targets medication related needs for patients transitioning between the inpatient and ambulatory settings. This role created and managed a new pharmacy residency training program with a goal to address hospital needs for improved medication-based transitions of care processes.

Pharmacy PGY1 Residency Coordinator Manager (5-7 direct reports)

This role required mobilization of the pharmacy residency program coordinator team to facilitate the growth of a robust program. It required providing strong mentorship through its first accreditation process and achieved the maximum permitted length of accreditation from the national accrediting organization.

linamatta@post.harvard.edu

Strong knowledge of hospital-wide systems Team-building and integration Breakthrough new program development

> Boston, MA May 2013

Piscataway, NJ May 1999

Boston, MA

Jul 2015-Jun 2020

Oct 2004- Nov 2020

July 2015-July 2016

Oct 2012-Aug 2015

617.216.2117

Pharmacy and Therapeutics Committee, Leadership Member

This role required coordination, facilitation, and communication of committee activities to hospital leadership while supervising and coordinate medication formulary initiatives at the hospital-level.

Clinical Pharmacy Specialist

This was a pioneer role focused on initiating a pharmacy-based cardiac services team. Efforts led to establishment of the pharmacist role in the cardiac surgery intensive care unit and coronary care unit with a three-fold increase in the size of the pharmacist team.

Senior Pharmacist

Several activities within this role were new to the institution and required consultation on appropriate drug therapy for inpatients and provided educational seminars to pharmacy staff and cardiac surgery service members.

Massachusetts General Brigham Digital Care Transformation

Director of Pharmacy

Jun 2017- Oct 2022 This position requires strong collaboration with the Cardiovascular Innovation Department and strategic planning on initiatives related to chronic disease management. Through leveraging digital care, we were able to establish several programs geared at population-based management of chronic disease states.

Teaching and Consulting Experience

Harvard Medical School

Course Co-Director

Established an educational program geared towards an international audience on the topics of contemporary pharmacotherapy and multidisciplinary-team building.

Harvard School of Public Health **Department of Health Policy & Management**

Independent Researcher, Advisor: Dr. Nancy Kane

Project title: Physician Perceptions on the Role of Cost in Clinical Decision Making Sep 2012-Oct 2013 Investigated the healthcare reform-related change in the institutional culture of healthcare delivery by surveying physicians, and analyzing and summarizing subsequent data

Research Consultant, Advisor: Dr. Nancy Kane

Project title: Case Study: Optimizing Medication Management Oct 2012-Feb 2013 Co-wrote an educational case with physician collaborator that focused on medication management and quality improvement efforts with the goal of identifying gaps in institutional culture that inhibit collaborative approach to quality improvement and accountability

Oct 2020- Jan 2022

Boston, MA

Sep 2005-Dec 2020

Jul 2001-Sep 2004

Jun 1999-Jul 2001

Boston, MA

Boston, MA

Partners International/Brigham and Women's Hospital Pharmacy

In-House Consultant

Conducted on-site strategic analysis of outpatient anticoagulation services at Heart Hospital in Doha, Qata and assessed strengths, limitations, and resources for completion of a business plan for implementation of new service line. The team subsequently launched a new anticoagulation service in spring 2014

Avation Health, Inc.

Consultant

Jan-Nov 2012 Evaluated new software application (FamilyTouch®) for start-up health innovation company and reviewed functionality of product and recommended improvements to company CEO and President Richard Siegrist. In addition, the role involved advising a team of nurses conducting pre and post nursing surveys and identifying and recommending solutions to systemic problems

Selected Certifications

Harvard Business School Brigham and Women's Hospital The Brigham Leadership Program Harvard Business School Executive Education

Brigham and Women's Hospital *Clinical Process Improvement Leadership Program* Certificate of Achievement

Harvard Law School Leadership and Negotiation Conference Certification of Completion

Harvard Business School

Institute of Strategy and Competitiveness Completion of Professor Porter's Value Based Healthcare Seminar

Brigham and Women's Hospital *LEAN Practitioner Training Program* Certificate of Achievement

Board of Pharmaceutical Specialties Board Certified Pharmaceutical Specialist Cambridge, MA Oct 2015 - May 2016

> Boston, MA Sep 2014-Jan 2015

> > Cambridge, MA April 2014

Cambridge, MA January 2013

Boston, MA Aug 2012-Jan 2013

Washington DC January 2005-present

Professional and Academic Affiliations

- Massachusetts Society of Health Systems Pharmacists-Nominating Committee
- Rho Chi Pharmaceutical Honor Society
- Phi Lambda Sigma Pharmaceutical Leadership Society
- Rutgers College of Pharmacy Honors Program

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Boston, MA

Lexington, MA

May 2012-Jun 2013

Awards

Brigham and Women's Hospital Starfish Award Brigham and Women's Hospital Partners in Excellence Award 2014 Annual Hematology Specialty Award, Society of Critical Care Medicine *(citation: #3)*

Selected Committees

- MGB Practice Standardization Subcommittee
- Department of Pharmacy Peer Review Committee
- Department of Pharmacy Rapid Cycle Improvement Committee
- BWH Drug Administration Guidelines Committee
- BWH Pain Management Committee
- BWH Pharmacy and Therapeutics Committee
- BWH ACTIVE Heart Failure Working Group
- MGB Pharmacy and Therapeutics Committee
- Brigham-Lipid Optimization Committee
- BWH Pharmacy Ambulatory and Transitions of Care Committee
- Anticoagulation Leadership Committee
- BWH Clinical Care Redesign Committee
- MGB Ambulatory Committee
- Digital Care Transformation Clinical Meeting

Selected Publications and Poster Presentations

- Scirica BM, Cannon CP, Fisher NDL, Gaziano TA, Zelle D, Chaney K, Miller A, Nichols H, Matta L, Gordon WJ Murphy S, Wagholikar KB, Plutzky, J, MacRae CA. Digital Care Transformation: Interim Report From the First 5000 Patients Enrolled in a Remote Algorithm-Based Cardiovascular Risk Management Program to Improve Lipid and Hypertension Control. *Circulation*. 2021 Feb 2; 143(5) 507-509.
- Fisher ND, Fera LE, Dunning JR, Desai S, Matta L, Liquori V, Pagliaro J, Pabo E, Merriam M, MacRae CA, Scirica, BM (2018), Development of an Entirely Remote, Non-Physician Led Hypertension Management Program. *Clin Cardiol.* 2019 Feb; 42(2):285-291. doi:<u>10.1002/clc.23141</u>
- Gillis G, Dempsey J, Sibicky S, Matta L, MacRae C, Kirshenbaum J, Faxon D, Churchill W. Development of a Pharmacy Resident-Run Transitions of Care Service in a High-Risk Cardiovascular Patient Population. J Pharm Prac Edu. 2018 Oct; 1(3):14.
- Cook BM, Carter DM, Dell'Orfano H, Matta L. Potassium Chloride Sustained Release Dosing Pathway in an Academic Medical Center. Crit Pathw Cardiol. 2017 Dec; 16(4):158-160.
- Dempsey J, Matta L, Carter D, Stevens C, Stevenson L, Desai A, Cheng, J. Assessment of Drug Therapy-Related Issues in an Outpatient Heart Failure Population and the Potential Impact of Pharmacist-Driven Intervention. J of Pharm Prac. 2017 Jun; 30(3): 318-323.
- Buckley LF, Seoane-Vazquez E, Cheng JW, Aldemerdash A, Cooper IM, Matta L, Medina DS, Mehra MR, Navarro-Velez K, Shea EL, Weintraub JR, Stevenson LW, Desai AS. Comparison of Ambulatory, High-Dose, Intravenous Diuretic Therapy to Standard Hospitalization and Diuretic Therapy of Treatment of Acute Decompensated Heart Failure. Am J Cardiol. 2016 Nov 1; 118(9): 1350-1355.
- Buckley LF, Carter DM, Matta L, Cheng JW, Stevens C, Belenkiy RM, Burpee LM, Young MA, Weiffenbach CS, Smallwood JA, Stevenson JW, Desai AS. Intravenous Diuretic Therapy for the Management of Heart Failure and Volume Overload in a Multidisciplinary Outpatient Unit. JACC Heart Fail. 2016; Jan 4 (1):1-8. doi: 10.1016/j.jchf.2015.06.017
- Gilmore J, Adams C, Blum R, Fanikos J, Hirning B, Matta L. Evaluation of a multi-target direct thrombin inhibitor dosing and titration guideline for patients suspected heparin-induced thrombocytopenia [Letter to the Editor]. Am J of Hematol. 2015; 90 (8): E143-E145.
- 9. Stevens C, Dell'Orfano H, Reardon DP, Matta L, Greenwood B, Atay J. Management of Bleeding Complications in Patients Taking Direct Oral Anticoagulants at a Large Tertiary Medical Center. Curr Emerg Hosp Med Rep. 2015; 3(3):162-167
- 10. Gilmore J, Adams C, Blum R, Fanikos J, Hirning BA, Matta L. Evaluation of a Direct Thrombin Inhibitor Dosing and Titration Guideline. 2014 Annual Hematology Specialty Award. Society of Critical Care Medicine, San Francisco, CA. January 2014.
- 11. Aday AW, Dell'Orfano H, Hirning BA, Matta L, O'Brien MH, Scirca BM, Avery KR, Morrow DA. Evaluation of a clinical pathway for sedation and analgesia of mechanically ventilated patients in a cardiac intensive care unit (CICU): The Brigham

and Women's Hospital Levine CICU sedation pathways. European Heart Journal: Acute Cardiovascular Care. 2013;2:299-305.

- Sylvester KW, Fanikos J, Anger KE, Matta L, Southard RA, Beik N, Lemire S, Dorfman DM, Berliner N. Impact of an Immunoglobulin G-Specific Enzyme-Linked Immunosorbent Assay on the Management of Heparin-Induced Thrombocytopenia. *Pharmacotherapy*. 2013; 33(11):1191-1198.
- 13. Implementation of a Clinical Pathway for Sedation and Analgesia for Mechanically Ventilated Patients in an Academic Tertiary Center Cardiac Intensive Care Unit. Dell'Orfano H, Hirning B, Matta L, Avery KR, Aday A, O'Brien M, Morrow D. Poster Presentation. Society of Critical Care Medicine Congress, Puerto Rico. January 2013.
- 14. Meeting its Match: Nonspecific versus IGG-Specific PF4 Antibody Testing in the Management of Heparin-Induced Thrombocytopenia. Sylvester K, Anger K, Matta L, Southard R, Beik N, Fanikos J, Lemire S, Dorfman D. Poster Presentation. American College of Cardiology, Chicago, Illinois. March 2012.
- 15. Evaluation of potassium sparing diuretics on renal function in decompensated heart failure patients: an exploratory pilot study at a tertiary medical center. Cornblower A, Dell'Orfano H, Matta L, Cheng J. Poster Presentation American Society of Health-Systems Conference, New Orleans, Louisana. December 2011.
- Yu-Chen Y, McDonnell A, Klinger E, Fowler B, Matta L, Voit D, Reddy P. Comparison of healthcare resource use between patients receiving ondansetron or palonosetron as prophylaxis for chemotherapy induced nausea and vomiting. J Oncol Pharm Practice 2010; 0(0): 1-7.
- 17. Fanikos J, Cina JL, Baroletti S, Fiumara K, Matta L, Goldhaber SZ. Adverse Drug Events in Hospitalized Cardiac Patients. Am J Cardiol. 2007; 100: 1465-1469.
- 18. Pharmacist Managed Influenza Vaccination Clinic at a Tertiary Academic Medical Center. Kronk C, Stevens R, Vaidya A, Fiumara K, Matta L, Churchill W. Poster Presentation American Society of Health-Systems Conference, San Francisco, California, June 2007.

Selected Presentations

- "Emergency Crisis Response: Boston Marathon Bombing". Spanish Society of Hospital Pharmacy 65th National Congress and Virtual Congress. October 2020
- 2. "Integrating Advances Clinical Pharmacy Practice into Patient Care Services". Harvard Medical School Pharmacy Leadership Seminar. Boston, Massachusetts July 2019.
- 3. "Cross Discipline Playbook-Insights from ACO Stakeholders to Achieve Operational Excellence". Panel presenter. CBI ACO Population Health Conference. Tampa, FL. December 2016.
- 4. "How to make the BWH iHub More Innovative". Brigham and Women's Hospital Leadership Program. Boston, Massachusetts, May 2016.
- 5. Managing the Patient with Heart Failure: Panel Discussion. Brigham and Women's Department of Cardiology. Boston, Massachusetts October 2016.
- 6. *"Principles of Process Improvement";* A Multidisciplinary Team Approach to Quality Improvement: Preventing Hospital-Acquired Venous Thromboembolism Workshop; Millenium Hotel. Doha, Qatar. February 2013.
- 7. "Oral Anticoagulation Management"; Heart Hospital and National Center for Cancer Care and Research Departments of Pharmacy: A Joint Workshop. Doha, Qatar. May 2012.
- 8. "Implementing New Standards for the Prevention and Treatment of VTE" Workshop Facilitator; Four Seasons Hotel, Boston, Massachusetts. September 2009.
- 9. "Preventing and Treating Venous Thromboembolism: Guideline-based Strategies for Improving Patient Outcomes" Workshop Facilitator; Four Seasons Hotel, Boston, Massachusetts. January 2009.
- 10. "Implementing Updated ACC/AHA Guidelines for ACS: Achieving New Standards of Care" Workshop Facilitator for the STRIVE Critical Pathways Workshop; Four Seasons Hotel, Boston, Massachusetts. January 2008.
- 11. "Heparin Induced Thrombocytopenia" New England Cardiology Symposium for Pharmacists at Sheraton Hotel, Boston, Massachusetts, September 2007.
- 12. "Warfarin Therapy: Facts and Tips. Presented at The National Alliance for Thrombosis and Thrombophilia (NATT) Conference; Boston Marriot Quincy, Massachusetts. October 2006.
- 13. "The Causes and Consequences of QT Prolongation"Presented at Johnson & Johnson PRD, Inc Conference at the Bridgewater Marriott, New Jersey. February 2006.
- 14. "Heparin-Induced Thrombocytopenia: Management and Challenges". Presented at Proactive Venous Thromboembolism Prophylaxis Conference, Brigham and Women's Hospital, Boston, Massachusetts. February 2006.

Committee Items – January 30, 2023

Public Works & Safety

In Committee:

- ORDR00398_12_12_2022
- Snow Emergency Parking Auburn St
- ORDR00399_12_12_2022 Asp
- ODNC00133_01_09_2023 Amend to
- ORDR00410_01_09_2023
- Asphalt sidewalk waiver request package West End Fire Station project
- Amend to Ch 13-180 Inn Street
- _09_2023 Screening Cmte Fire Chief



IN CITY COUNCIL

ORDERED:

December 12, 2022

Amended as follows, with deletions *double-stricken and italicized*, and additions *double-underlined and italicized*:

THAT pursuant to the CITY OF NEWBURYPORT Code of Ordinances Section 13-180.1 and Section 13-166 the CITY COUNCIL of the CITY OF NEWBURYPORT hereby amends and approves as follows:

Chapter 13	Traffic and Motor Vehicles
Article 2	Administration
Section 13-29	Snow emergencies

Amend existing Section as follows, with deletions double stricken-through, and additions doubleunderlined:

Upon the declaration of a snow emergency by the superintendent of the department of public works, no parking shall be allowed on any street or way in the city <u>except of the following street(s)</u>:

1. <u>Auburn Street on the westerly side from Vernon Street to Pole 9. Vehicles shall move no later than</u> <u>twelve (12) hours after snow emergency ceases to allow for snow removal.</u>

The superintendent, upon such declaration, shall cause notice of the snow emergency to be given by radio broadcast or other suitable media. Upon the declaration of the end of the snow emergency by the superintendent, parking shall be allowed on any street or way in the city. Provided, however, that this section shall not be construed to permit parking where it is specifically prohibited by the provisions of this chapter.

Councillor Heather L. Shand

In City Council December 12, 2022:

Motion to refer to Public Works & Safety by Councillor Zeid, seconded by Councillor Donahue. So voted.



IN CITY COUNCIL

ORDERED:

December 12, 2022

An Order to Allow a Waiver for Asphalt Sidewalks on Lt. Leary Drive and Storey Avenue as part of the West End Fire Station project

Be it ordained by the City Council of the City of Newburyport as follows:

Chapter 12	Streets, Sidewalks and Other Public Places
Article III	Sidewalks
Section 54	Street, way or grounds specification
Subsection (b)	Sidewalk material

Pursuant to Section 12-54(b) which states as follows:

Exception: Asphalt may be used as an alternative material anywhere in the City upon obtaining a waiver granted by City Council Order.

The City Council of the City of Newburyport hereby grants a waiver to use asphalt as an alternative material for the sidewalk located on Lt. Leary Drive, Storeybrooke Road and Storey Avenue as part of the West End Fire Station project.

Councilor James McCauley

In City Council December 12, 2022:

Motion to refer to Public Works & Safety by Councillor Zeid, seconded by Councillor Donahue. So voted.



IN CITY COUNCIL

ORDERED:

January 9, 2023

AN ORDINANCE TO AMEND AN ORDINANCE ENTITLED TRAFFIC AND MOTOR VEHICLES

Be it ordained by the City Council of the City of Newburyport as follows:

Chapter 13	Traffic and Motor Vehicles
Article 4	Specific Street Schedules
Division 6	Stopping, Standing and Parking
Section 13-180 (j)	Resident parking – Inn Street Mixed-Use Area

THAT Chapter 13 Article IV Division 6, Section 13-180(j) of the Code of Ordinances, City of Newburyport, Massachusetts, is hereby amended to read as follows, with *deletions double-stricken and in italicized*, and additions *double-underlined and italicized*:

(j) Inn Street Mixed-Use Area. A bona fide hardship exists for residents of the Inn Street Mixed-Use Area caused by unique or special conditions there that preclude designation of a residential parking permit zone incorporating any of the adjacent streets, which are commercial in nature. Notwithstanding anything in this section 13-180 to the contrary, the parking clerk or their designee shall issue residential parking permits for use within the Green Street Parking Lot (Assessor's Parcel 3-28) to no more than four (4) five (5) households that reside within the Inn Street Mixed-Use Area.

(1) Applicants under this subsection (j) may apply, and renew or transfer such permits pursuant to subsections (c) and (d), respectively, but shall remain ineligible always for visitor parking permits pursuant to subsection (f).

(2) A parking permit under this subsection (j) shall not guarantee or reserve a parking space within the Green Street Parking Lot, nor shall it excuse the permit holder from observance of any traffic or parking regulation other than the time limit on parking, or from having to move all vehicles from the Green Street Parking Lot as ordered by the city during a declared snow emergency.

(3) It shall be a violation of this section to use a parking permit issued under this subsection in any residential parking permit zone.

(4) The parking clerk or their [designee] shall issue parking permits under this subsection on a first-come, first-served basis, or by lottery if more than $\frac{\text{four } (4)}{\text{five } (5)}$ complete applications are filed on the same day.

Councillor Jennie L. Donahue

In City Council January 9, 2023:

Motion to refer to Public Works & Safety by Councillor McCauley, seconded by Councillor Donahue. So voted.



IN CITY COUNCIL

ORDERED:

January 9, 2023

THAT, **THE CITY COUNCIL OF THE CITY OF NEWBURYPORT HEREBY CONFIRMS** the belownamed individuals to the Newburyport Fire Chief Screening Committee. Said Committee is established pursuant to Code Section 2-316 (a)(2) et al with required notification and shall consist of nine (9) voting members who are named and appointed according to the attached Mayoral letter of appointment and confirmed by this order.

According to Code Section 2-316 (a)(3) the members of the screening committee may be individuals who are employed by the City, residents of the city and/or business community, and others who may have expertise in the field.

Following the effective date of this order, the committee shall meet within thirty (30) days to organize and plan a process for solicitation by advertisement, including without limitation, in appropriate professional journals, and by other means, to receive applications for the position of fire chief. The committee shall review all applications and conduct such interviews as it deems appropriate.

There shall be an evaluation by an assessment center whose results shall be available to the screening committee and the Mayor prior to its interview of candidates. Not more than 180 days from the date of the first organizational meeting of the committee, it shall submit to the Mayor not less than three (3) but not more than five (5) candidates. Within sixty (60) from this submission the Mayor shall interview and select one (1) candidate and then submit the same to the City Council for confirmation.

Councillor James J. McCauley

In City Council January 9, 2023:

Motion to refer to Public Works & Safety by Councillor Zeid, seconded by Councillor Wright. So voted.



Office of the Mayor Sean R. Reardon, Mayor

60 PLEASANT STREET - P.O. Box 550 NEWBURYPORT, MA 01950 PHONE 978-465-4413 MAYOR@CITYOFNEWBURYPORT.COM

To:	President and Members of the City Council
From:	Sean R. Reardon, Mayor
Date:	January 9, 2023
Subject:	Appointment

I hereby appoint, subject to your approval, the following named individuals to the Newburyport Fire Chief Screening Committee:

Frank Cousins, Newburyport, MA 01950 Marshal Mark Murray, Merrimac, MA 01860 Connie Preston, Newburyport, MA 01950 Jim McCauley, Newburyport, MA 01950 Kevin Parseghian, Newburyport, MA 01950 Paul Hogg, Newburyport, MA 01950 Chief Jen Collins-Brown, Topsfield, MA 01983 Donna Drelick, Methuen, MA 01950 Nora Duggan, Salisbury, MA 01952