TENTATIVE AGENDA & MEETING NOTICE
BOARD OF COUNTY COMMISSIONERS

TUESDAY, MAY 7, 2024
5:30 P.M.

WATAUGA COUNTY ADMINISTRATION BUILDING
COMMISSIONERS' BOARD ROOM

TIME	#	TOPIC	PRESENTER	PAGE
5:30	1	CALL REGULAR MEETING TO ORDER		
	2	APPROVAL OF MINUTES: April 16, 2024, Regular Meeting April 16, 2024, Closed Session		1
	3	APPROVAL OF THE MAY 7, 2024, AGENDA		9
5:35	4	PUBLIC COMMENT – Will last up to 1-hour dependent on number of speakers	CHAIRMAN TURNBOW	11
5:40	5	PUBLIC HEARING TO ALLOW CITIZEN COMMENT ON AN ORDINANCE UPDATE	MR. WILL HOLT	13
5:45	6	EMERGENCY OPERATIONS PLAN REVIEW	MR. DOUG LOGAN	61
5:50	7	PAY AND CLASSIFICATION STUDY REVIEW	MR. DAVID HILL	89
5:55	8	APPALCART CONTRACTS FOR FY 2025	MR. CRAIG HUGHES	117
6:00	9	PROPOSAL TO CONTRACT WITH HIGH COUNTRY COUNCIL OF GOVERNMENTS FOR AN UPDATE OF THE COMPREHENSIVE LAND USE PLAN	MR. JASON WALKER	135
6:05	10	MISCELLANEOUS ADMINISTRATIVE MATTERS A. Presentation of the FY 2025 Capital Improvement Plan (CIP) B. Presentation of the Manager's FY 2025 Recommended Budget C. Boards and Commissions D. Announcements	MR. DERON GEOUQUE	 139 141 143 147
6:10	11	BREAK		147
6:15	12	CLOSED SESSION Attorney/Client Matters – G. S. 143-318.11(a)(3)		152
6:45	13	ADJOURN		

AGENDA ITEM 2:

APPROVAL OF MINUTES:

April 16, 2024, Regular Meeting
April 16, 2024, Closed Session

DRAFT

MINUTES

WATAUGA COUNTY BOARD OF COMMISSIONERS
TUESDAY, APRIL 16, 2024

The Watauga County Board of Commissioners held a regular meeting, as scheduled, on Tuesday, April 16, 2024, at 5:30 P.M. in the Commissioners' Board Room located in the Watauga County Administration Building, Boone, North Carolina.

Vice-Chairman Wallin called the meeting to order at 5:31 P.M. The following were present:

PRESENT: Charlie Wallin, Vice-Chairman
Todd Castle, Commissioner
Braxton Eggers, Commissioner
Ray Russell, Commissioner
Andrea Capua, County Attorney
Paul Capua, County Attorney
Deron Geouque, County Manager
Anita J. Fogle, Clerk to the Board

[Clerk's Note: Chairman Turnbow was not able to attend the meeting.]

Commissioner Castle opened with a prayer and Commissioner Russell led the Pledge of Allegiance.

APPROVAL OF MINUTES

Vice-Chairman Wallin called for additions and/or corrections to the April 2, 2024, regular minutes and closed session minutes.

Commissioner Eggers, seconded by Commissioner Russell, moved to approve the April 2, 2024, regular meeting minutes as presented.

VOTE: Aye-4(Wallin, Castle, Eggers, Russell)
Nay-0
Absent-1(Turnbow)

Commissioner Eggers, seconded by Commissioner Russell, moved to approve the April 2, 2024, closed session minutes as presented.

VOTE: Aye-4(Wallin, Castle, Eggers, Russell)
Nay-0
Absent-1(Turnbow)

APPROVAL OF AGENDA

Vice-Chairman Wallin called for additions and/or corrections to the April 16, 2024, agenda.

Commissioner Russell, seconded by Commissioner Castle, moved to approve the April 16, 2024, agenda as presented.

VOTE: Aye-4(Wallin, Castle, Eggers, Russell)
Nay-0
Absent-1(Turnbow)

PUBLIC COMMENT

Ms. Hilda Downer shared that there is now a local Poet Laureate who will be amplifying poetry and promoting poetry writing. The Poet Laureate will also be available for significant occasions and events including civil events.

PROPOSED PROCLAMATION FOR RESILIENT & THRIVING COMMUNITIES WEEK

Ms. Kellie Bass, with the Watauga Compassionate Community Initiative (WCCI), presented a proposed proclamation naming April 28 - May 6, 2024 as Resilient and Thriving Communities Week. Ms. Bass shared information on the Initiative which began in 2017 and thanked the Board for support over the years through the building of the Valle Crucis School, greenway construction, the Community Recreation Center, arts programs, public safety, as well as programs through Social Services and the Project on Aging.

Vice-Chairman Wallin read the proclamation.

Commissioner Russell, seconded by Commissioner Eggers, moved to adopt the proclamation as presented.

VOTE: Aye-4(Wallin, Castle, Eggers, Russell)
Nay-0
Absent-1(Turnbow)

Vice-Chairman Wallin paused to welcome Mr. Paul Capua with Capua Law, who was in attendance, along with County Attorney Andrea Capua, representing the newly appointed firm now serving as the County Attorney.

PROPOSED LETTER OF SUPPORT FOR VAYA TO BE THE ADMINISTRATOR OF THE CFSP

Vice-Chairman Wallin stated that Mr. Dustin Burleson, Vaya Community Relations Regional Director, was not available to attend the meeting. The Vice-Chairman called upon Commissioner Russell who, along with himself, sits on the Vaya Regional Board representing Region III, for comments. Commissioner Russell stated that he would like to hear from Mr. Tom Hughes, Social Services Director, first.

Mr. Hughes stated that he would not sign a support letter. He had requested time to talk with Mr. Burleson but a time had not been scheduled to meet. Mr. Hughes stated that his Social Workers were in peril. Some placements could not be made without Vaya. Vaya had made promises to step up with placements when needed and they haven't. This means that children remain in the DSS Office, overnight, in the care of a Social Worker. Sometimes this is a dangerous situation for the Social Worker when the child needs psychiatric care. Mr. Hughes stated there was a current situation where a child is in a psychiatric unit; however, a Social Work had to be with the child at all times. Social Workers were taking 3-hour shifts with the child. Mr. Hughes stated that he could not sign a support letter unless issues such as these were remedied. Mr. Hughes stated that there were simply not enough beds for the children in need. Mr. Hughes followed up by stating the he was not against Vaya, but felt they needed to be held accountable to keep promises made. The issue was not only about the children as it also affected staff as it could be a safety concern as well as the additional amount of comp time it generated.

Vice-Chairman Wallin shared appreciation, on behalf of the Board, to Mr. Hughes and his staff while working through these issues.

The request for approval of the proposed support letter failed due to no motion being made after discussion.

TAX MATTERS

A. Monthly Collections Report

Mr. Larry Warren, Tax Administrator, presented the Tax Collections Report for the month of March 2024. The report was presented for information only and, therefore, no action was required.

B. Refunds and Releases

Mr. Larry Warren, Tax Administrator, presented the Refunds and Releases Report for March 2024 for Board approval:

TO BE TYPED IN MINUTE BOOK

Commissioner Castle, seconded by Commissioner Eggers, moved to approve the Refunds and Releases Report for March 2024 as presented.

VOTE: Aye-4(Wallin, Castle, Eggers, Russell)
Nay-0
Absent-1(Turnbow)

C. Board of Equalization and Review (E&R) Schedule

Mr. Larry Warren, Tax Administrator, discussed the scheduling of the FY 2024 Board of Equalization and Review (E&R). The Board may create a special Board of Equalization and Review that will serve this spring. In previous years, the Board of E&R incorporated the County Manager as an alternate member. A proposed resolution was presented for consideration should

the Board wish to appoint itself and the County Manager (as an alternate member) to the Board of E&R.

Mr. Warren stated that the recommended convening date for the Board of Equalization and Review was Monday**,** April 29, 2024, and the Adjournment was recommended for Friday**,** May 10, 2024, at 5:00 P.M. with both being held in the County Commissioners Conference Room. Mr. Warren requested meeting dates for the Board of E&R be set as well.

The member compensation also needed to be set. For the past several years it has been $75.00 per session.

After discussion, Commissioner Russell, seconded by Commissioner Eggers, moved to:

- set the convening date as April 29, 2024 at 2:00 P.M. in the Commissioners Conference Room
- set the adjournment date as May 10, 2024, at 5:00 P.M. in the Commissioners Conference Room
- Schedule Board of E&R meeting dates for May 8 & 9, 2024, from 2:00 P.M. until 7:00 P.M. in the Commissioners Conference Room
- adopt the Resolution Establishing the Watauga County Board of Equalization and Review as the five-member County Commissioners, each having one vote, and the County Manager, to serve as an alternate member
- set the compensation rate at $75 per session with the County Manager not receiving any additional compensation

VOTE: Aye-4(Wallin, Castle, Eggers, Russell)
Nay-0
Absent-1(Turnbow)

PUBLIC HEARING REQUEST FOR ORDINANCE UPDATE

Mr. Will Holt stated that at a previous Board Meeting, consideration to schedule a public hearing to change the Watauga County Building Code Ordinance was tabled until the appendices could be provided for review and consideration. That process has now happened.

The proposed amendment is as below with the highlighted portion being the addition:

Section 1-2.1 Fire Code Adopted

On July 1, 1991, or other date established by the North Carolina Building Code Council, the Standard Fire Prevention Code – 1988 Edition and all appendices therein as adopted by the Building Code Council and as amended …

Commissioner Eggers, seconded by Commissioner Russell, moved to schedule the public hearing on May 7, 2024, at 5:30 P.M.

VOTE: Aye-4(Wallin, Castle, Eggers, Russell)
Nay-0
Absent-1(Turnbow)

MISCELLANEOUS ADMINISTRATIVE MATTERS

A. Valle Crucis School Change Order #3 and #4

County Manager Geouque presented Change Orders 3 and 4 for the Valle Crucis Elementary School project. Below is a detailed breakout of the Change Orders for the project:

The original contract sum was $47,874,600.

1. Change Order #1 was ($382,011) bringing the new contract sum to $47,492,589.
2. Change Order #2 was $10,508.50 bringing the new contract sum to $47,503,097.50. This brought the sum of all change orders to ($371,502.50).
3. Change Order #3 was $56,888.54 bringing the new contract sum to $47,559,986.04. This brought the sum of all change orders to ($314,613.96).
4. Change Order #4 was $29,014.44 bringing the new contract sum to $47,589,000.48. This brought the sum of all change orders to ($285,599.52). The change order shows the contract time increased by 40 days for weather and mud days and indicates the completion date of December 19, 2024.

Mr. Geouque stated that Change Order 3 was mainly for the liquid chemical feeder and plumbing changes and Change Order 4 was primarily for main water line reroutes and connections. Approval of Change Orders 3 & 4 would still leave a credit balance of $285,599.52.

After brief discussion, Commissioner Russell, seconded by Commissioner Eggers, moved to approve Change Orders 3 & 4 in the amount of $56,888.54 and $29,014.44, respectively.

VOTE: Aye-4(Wallin, Castle, Eggers, Russell)
Nay-0
Absent-1(Turnbow)

B. Budget Amendments

County Manager Geouque, who also serves as Finance Director, presented the following budget amendments:

Account #	Description	Debit	Credit
143300-343010	Emergency Placement Fund		$16,583
145410-440810	Emergency Placement Fund Expenses	$16,583	

The amendment recorded additional awards received from the NC Department of Health and Human Services to assist with placement needs for children. No County match was required.

103991-399100	Fund Balance		$209,920
109800-498021	Transfer to Capital Projects Fund	$209,920	
213980-398100	Transfer from General Fund		$209,920
219930-470029	CIP – Mobile Units	$150,000	
219930-470034	CIP – Security Cameras	$1,321	
219930-470036	CIP – HAVC	$25,000	
219930-470041	CIP – Pavement Repair	$10,022	
219930-470069	CIP – 1:1 Devices	$23,577	

The amendment returned unused CIP funds from the completed projects listed above to set aside capital project funds for the schools for Fiscal Year 2022.

103991-399100	Fund Balance		$69,845
109800-498021	Transfer to Capital Projects Fund	$69,845	
213980-398100	Transfer from General Fund		$69,845
219930-470026	CIP – Vehicle Replacements	$47,867	
219930-470029	CIP – Mobile Units	$2,971	
219930-470034	CIP – Security Cameras	$900	
219930-470036	CIP – HVAC	$4,712	
219930-470069	CIP – 1:1 Devices	$5,949	
219930-470041	CIP – Pavement Repair	$7,446	

The amendment returned unused CIP funds from the completed projects listed above to set aside capital project funds for the schools for Fiscal Year 2023.

105911-471000	Lottery Funds	$144,932	
103300-349909	Lottery Funds		$144,932

The amendment recognized Lottery Funds above budget per Board action taken on January 16, 2024.

Commissioner Russell, seconded by Commissioner Castle, moved to approve the budget amendments as presented by Mr. Geouque.

VOTE: Aye-4(Wallin, Castle, Eggers, Russell)
Nay-0
Absent-1(Turnbow)

C. Announcements

County Manager Geouque announced the following:

- The Board of Commissioners are invited along with the School Board to a tour of the new Valle Crucis School on April 19, 2024, at 2:00 P.M. Following the tour, at 3:30 P.M., Chairman Turnbow will tour the current Valle Crucis School with a group interested in retaining the building for historical purposes. The County Manager stated that County business will not be conducted; however, there may be a quorum present at one or both of the tours.

- The following Special Meetings will be held in May 2024:
  May 13 Budget Work Session at 12:00 P.M. in the Commissioners Conference Room
  May 14 Budget Work Session at 9:00 A.M. in the Commissioners Conference Room
  May 21 A Public Hearing to allow for citizen comment on the Proposed Budget at 5:30 P.M. in the Commissioners Board Room.

- The Trustees of Caldwell Community College & Technical Institute have invited the Board of Commissioners to a meeting on Wednesday, May 15, 2024, at 6:00 P.M. at the Watauga Campus on Hwy 105 Bypass, Boone NC, in the Student Services Center.

CLOSED SESSION

At 6:19 P.M., Commissioner Castle, seconded by Commissioner Eggers, moved to enter Closed Session to discuss Attorney/Client Matters, per G. S. 143-318.11(a)(3).

VOTE: Aye-4(Wallin, Castle, Eggers, Russell)
Nay-0
Absent-1(Turnbow)

Commissioner Eggers, seconded by Commissioner Castle, moved to resume the open meeting at 7:07 P.M.

VOTE: Aye-4(Wallin, Castle, Eggers, Russell)
Nay-0
Absent-1(Turnbow)

ADJOURN

Commissioner Castle, seconded by Commissioner Eggers, moved to adjourn the meeting at 7:07 P.M.

VOTE: Aye-4(Wallin, Castle, Eggers, Russell)
Nay-0
Absent-1(Turnbow)

Charlie Wallin, Vice-Chairman

ATTEST: Anita J. Fogle, Clerk to the Board

AGENDA ITEM 3:

APPROVAL OF THE MAY 7, 2024, AGENDA

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AGENDA ITEM 4:

PUBLIC COMMENT

MANAGER'S COMMENTS:

Public Comment will last up to 1-hour dependent upon the number of speakers.

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AGENDA ITEM 5:

PUBLIC HEARING TO ALLOW CITIZEN COMMENT ON AN ORDINANCE UPDATE

MANAGER'S COMMENTS:

A public hearing is being held to allow citizen comment on changes to the Watauga County Building Code Ordinance. The appendices as referenced in the proposed amendment to the Building Code Ordinance were provided to the Board at a previous meeting for review.

The proposed amendment is as below with the highlighted portion being the addition:

> *Section 1-2.1 Fire Code Adopted*
>
> *On July 1, 1991, or other date established by the North Carolina Building Code Council, the Standard Fire Prevention Code – 1988 Edition and all appendices therein as adopted by the Building Code Council and as amended …*

Upon completion of the public hearing the Board may adopt the ordinance as presented, schedule a work session, or request additional changes.

Staff seeks direction from the Board.

PUBLIC SERVICE ANNOUNCEMENT

PUBLIC HEARING NOTICE

The Watauga County Board of Commissioners will hold a public hearing to allow citizen comment on a proposed amendment (***addition***) to the Watauga County Building Code Ordinance as below:

> Section 1-2.1 Fire Code Adopted
>
> On July 1, 1991, or other date established by the North Carolina building code council, the Standard Fire Prevention code – 1988 edition ***and all appendices therein*** as adopted by the Building Code Council and as amended …

The public hearing will be held on Tuesday, May 7, 2024, at 5:30 P.M. in the Commissioners' Board Room located in the Watauga County Administration Building at 814 West King Street, Boone, North Carolina. Interested parties are encouraged to attend. For information or questions please call 828-264-4235.

Larry Turnbow, Chairman
Watauga County Board of Commissioners

Watauga County Emergency Services

184 Hodges Gap Rd, Suite D
Boone, NC 28607
Phone 828-264-4235
Fax 828-265-7617

Fire Marshal ♦ Emergency Management ♦ Communications

February 26, 2024

To: Board of Commissioners

CC: Deron Geouque, County Manager
Jason Walker, Planning Director
Shane Garland, Fire Marshal
Anita Fogle, Clerk to the Board

Subject: Ordinance Update

Board of Commissioners,

Please consider my request to change the Watauga County Building Code Ordinance as highlighted below:

Section 1-2.1 Fire Code Adopted

On July 1, 1991, or other date established by the North Carolina Building Code Council, the Standard Fire Prevention Code – 1988 Edition and all appendices therein as adopted by the Building Code Council and as amended …

It is requested that the Board sets a public hearing to receive public comment and approve this change.

Respectfully,

Will Holt
ES Director

APPENDIX A

BOARD OF APPEALS

Deleted.

APPENDIX B

FIRE-FLOW REQUIREMENTS FOR BUILDINGS

The provisions contained in this appendix are not mandatory unless specifically referenced in the adopting ordinance.

SECTION B101
GENERAL

B101.1 Scope. The procedure for determining fire-flow requirements for buildings or portions of buildings hereafter constructed shall be in accordance with this appendix. This appendix does not apply to structures other than buildings.

SECTION B102
DEFINITIONS

B102.1 Definitions. For the purpose of this appendix, certain terms are defined as follows:

FIRE-FLOW. The flow rate of a water supply, measured at 20 pounds per square inch (psi) (138 kPa) residual pressure, that is available for fire fighting.

FIRE-FLOW CALCULATION AREA. The floor area, in square feet (m^2), used to determine the required fire flow.

SECTION B103
MODIFICATIONS

B103.1 Decreases. The fire chief is authorized to reduce the fire-flow requirements for isolated buildings or a group of buildings in rural areas or small communities where the development of full fire-flow requirements is impractical.

B103.2 Increases. The fire chief is authorized to increase the fire-flow requirements where conditions indicate an unusual susceptibility to group fires or conflagrations. An increase shall not be more than twice that required for the building under consideration.

B103.3 Areas without water supply systems. For information regarding water supplies for fire-fighting purposes in rural and suburban areas in which adequate and reliable water supply systems do not exist, the *fire code official* is authorized to utilize NFPA 1142 or the *International Wildland-Urban Interface Code.*

SECTION B104
FIRE-FLOW CALCULATION AREA

B104.1 General. The fire-flow calculation area shall be the total floor area of all floor levels within the *exterior walls*, and under the horizontal projections of the roof of a building, except as modified in Section B104.3.

B104.2 Area separation. Portions of buildings which are separated by *fire walls* without openings, constructed in accordance with the *International Building Code,* are allowed to be considered as separate fire-flow calculation areas.

B104.3 Type IA and Type IB construction. The fire-flow calculation area of buildings constructed of Type IA and Type IB construction shall be the area of the three largest successive floors.

Exception: Fire-flow calculation area for open parking garages shall be determined by the area of the largest floor.

SECTION B105
FIRE-FLOW REQUIREMENTS FOR BUILDINGS

B105.1 One- and two-family dwellings, Group R-3 and R-4 buildings and townhouses. The minimum fire-flow and flow duration requirements for one- and two-family *dwellings*, Group R-3 and R-4 buildings and townhouses shall be as specified in Tables B105.1(1) and B105.1(2).

B105.2 Buildings other than one- and two-family dwellings, Group R-3 and R-4 buildings and townhouses. The minimum fire-flow and flow duration for buildings other than one- and two-family *dwellings*, Group R-3 and R-4 buildings and townhouses shall be as specified in Tables B105.2 and B105.1(2).

TABLE B105.1(1)
REQUIRED FIRE-FLOW FOR ONE- AND TWO-FAMILY DWELLINGS, GROUP R-3 AND R-4 BUILDINGS AND TOWNHOUSES

FIRE-FLOW CALCULATION AREA (square feet)	AUTOMATIC SPRINKLER SYSTEM (Design Standard)	MINIMUM FIRE-FLOW (gallons per minute)	FLOW DURATION (hours)
0-3,600	No automatic sprinkler system	1,000	1
3,601 and greater	No automatic sprinkler system	Value in Table B105.1(2)	Duration in Table B105.1(2) at the required fire-flow rate
0-3,600	Section 903.3.1.3 of the *International Fire Code* or Section P2904 of the *International Residential Code*	500	$^1/_2$
3,601 and greater	Section 903.3.1.3 of the *International Fire Code* or Section P2904 of the *International Residential Code*	$^1/_2$ value in Table B105.1(2)	1

For SI: 1 square foot = 0.0929 m^2, 1 gallon per minute = 3.785 L/m.

TABLE B105.1(2)
REFERENCE TABLE FOR TABLES B105.1(1) AND B105.2

FIRE-FLOW CALCULATION AREA (square feet)					FIRE-FLOW (gallons per minute)[b]	FLOW DURATION (hours)
Type IA and IB[a]	Type IIA and IIIA[a]	Type IV and V-A[a]	Type IIB and IIIB[a]	Type V-B[a]		
0-22,700	0-12,700	0-8,200	0-5,900	0-3,600	1,500	2
22,701-30,200	12,701-17,000	8,201-10,900	5,901-7,900	3,601-4,800	1,750	
30,201-38,700	17,001-21,800	10,901-12,900	7,901-9,800	4,801-6,200	2,000	
38,701-48,300	21,801-24,200	12,901-17,400	9,801-12,600	6,201-7,700	2,250	
48,301-59,000	24,201-33,200	17,401-21,300	12,601-15,400	7,701-9,400	2,500	
59,001-70,900	33,201-39,700	21,301-25,500	15,401-18,400	9,401-11,300	2,750	
70,901-83,700	39,701-47,100	25,501-30,100	18,401-21,800	11,301-13,400	3,000	3
83,701-97,700	47,101-54,900	30,101-35,200	21,801-25,900	13,401-15,600	3,250	
97,701-112,700	54,901-63,400	35,201-40,600	25,901-29,300	15,601-18,000	3,500	
112,701-128,700	63,401-72,400	40,601-46,400	29,301-33,500	18,001-20,600	3,750	
128,701-145,900	72,401-82,100	46,401-52,500	33,501-37,900	20,601-23,300	4,000	4
145,901-164,200	82,101-92,400	52,501-59,100	37,901-42,700	23,301-26,300	4,250	
164,201-183,400	92,401-103,100	59,101-66,000	42,701-47,700	26,301-29,300	4,500	
183,401-203,700	103,101-114,600	66,001-73,300	47,701-53,000	29,301-32,600	4,750	
203,701-225,200	114,601-126,700	73,301-81,100	53,001-58,600	32,601-36,000	5,000	
225,201-247,700	126,701-139,400	81,101-89,200	58,601-65,400	36,001-39,600	5,250	
247,701-271,200	139,401-152,600	89,201-97,700	65,401-70,600	39,601-43,400	5,500	
271,201-295,900	152,601-166,500	97,701-106,500	70,601-77,000	43,401-47,400	5,750	
295,901-Greater	166,501-Greater	106,501-115,800	77,001-83,700	47,401-51,500	6,000	
—	—	115,801-125,500	83,701-90,600	51,501-55,700	6,250	
—	—	125,501-135,500	90,601-97,900	55,701-60,200	6,500	
—	—	135,501-145,800	97,901-106,800	60,201-64,800	6,750	
—	—	145,801-156,700	106,801-113,200	64,801-69,600	7,000	
—	—	156,701-167,900	113,201-121,300	69,601-74,600	7,250	
—	—	167,901-179,400	121,301-129,600	74,601-79,800	7,500	
—	—	179,401-191,400	129,601-138,300	79,801-85,100	7,750	
—	—	191,401-Greater	138,301-Greater	85,101-Greater	8,000	

For SI: 1 square foot = 0.0929 m^2, 1 gallon per minute = 3.785 L/m, 1 pound per square inch = 6.895 kPa.
a. Types of construction are based on the *International Building Code*.
b. Measured at 20 psi residual pressure.

TABLE B105.2
REQUIRED FIRE-FLOW FOR BUILDINGS OTHER THAN ONE- AND TWO-FAMILY DWELLINGS, GROUP R-3 AND R-4 BUILDINGS AND TOWNHOUSES

AUTOMATIC SPRINKLER SYSTEM (Design Standard)	MINIMUM FIRE-FLOW (gallons per minute)	FLOW DURATION (hours)
No automatic sprinkler system	Value in Table B105.1(2)	Duration in Table B105.1(2)
Section 903.3.1.1 of the *International Fire Code*	25% of the value in Table B105.1(2)[a]	Duration in Table B105.1(2) at the reduced flow rate
Section 903.3.1.2 of the *International Fire Code*	25% of the value in Table B105.1(2)[b]	Duration in Table B105.1(2) at the reduced flow rate

For SI: 1 gallon per minute = 3.785 L/m.
a. The reduced fire-flow shall be not less than 1,000 gallons per minute.
b. The reduced fire-flow shall be not less than 1,500 gallons per minute.

B105.3 Water supply for buildings equipped with an automatic sprinkler system. For buildings equipped with an approved *automatic sprinkler system*, the water supply shall be capable of providing the greater of:

1. The *automatic sprinkler system* demand, including hose stream allowance.
2. The required fire-flow.

SECTION B106
REFERENCED STANDARDS

ICC	IBC—15	International Building Code	B104.2,
ICC	IFC—15	International Fire Code	Tables B105.1(1) and B105.2
ICC	IWUIC—15	International Wildland-Urban Interface Code	B103.3
ICC	IRC—15	International Residential Code	Table B105.1(1)
NFPA	1142—12	Standard on Water Supplies for Suburban and Rural Fire Fighting	B103.3

APPENDIX C
FIRE HYDRANT LOCATIONS AND DISTRIBUTION

The provisions contained in this appendix are not mandatory unless specifically referenced in the adopting ordinance.

SECTION C101
GENERAL

C101.1 Scope. In addition to the requirements of Section 507.5.1 of the *International Fire Code*, fire hydrants shall be provided in accordance with this appendix for the protection of buildings, or portions of buildings, hereafter constructed or moved into the jurisdiction.

SECTION C102
NUMBER OF FIRE HYDRANTS

C102.1 Minimum number of fire hydrants for a building. The number of fire hydrants available to a building shall be not less than the minimum specified in Table C102.1.

SECTION C103
FIRE HYDRANT SPACING

C103.1 Hydrant spacing. Fire apparatus access roads and public streets providing required access to buildings in accordance with Section 503 of the *International Fire Code* shall be provided with one or more fire hydrants, as determined by Section C102.1. Where more than one fire hydrant is required, the distance between required fire hydrants shall be in accordance with Sections C103.2 and C103.3.

C103.2 Average spacing. The average spacing between fire hydrants shall be in accordance with Table C102.1.

Exception: The average spacing shall be permitted to be increased by 10 percent where existing fire hydrants provide all or a portion of the required number of fire hydrants.

C103.3 Maximum spacing. The maximum spacing between fire hydrants shall be in accordance with Table C102.1.

SECTION C104
CONSIDERATION OF EXISTING FIRE HYDRANTS

C104.1 Existing fire hydrants. Existing fire hydrants on public streets are allowed to be considered as available to meet the requirements of Sections C102 and C103. Existing fire hydrants on adjacent properties are allowed to be considered as available to meet the requirements of Sections C102 and C103 provided that a fire apparatus access road extends between properties and that an easement is established to prevent obstruction of such roads.

TABLE C102.1
REQUIRED NUMBER AND SPACING OF FIRE HYDRANTS

FIRE-FLOW REQUIREMENT (gpm)	MINIMUM NUMBER OF HYDRANTS	AVERAGE SPACING BETWEEN HYDRANTS[a, b, c, f, g] (feet)	MAXIMUM DISTANCE FROM ANY POINT ON STREET OR ROAD FRONTAGE TO A HYDRANT[d, f, g]
1,750 or less	1	500	250
2,000-2,250	2	450	225
2,500	3	450	225
3,000	3	400	225
3,500-4,000	4	350	210
4,500-5,000	5	300	180
5,500	6	300	180
6,000	6	250	150
6,500-7,000	7	250	150
7,500 or more	8 or more[e]	200	120

For SI: 1 foot = 304.8 mm, 1 gallon per minute = 3.785 L/m.

a. Reduce by 100 feet for dead-end streets or roads.

b. Where streets are provided with median dividers that cannot be crossed by fire fighters pulling hose lines, or where arterial streets are provided with four or more traffic lanes and have a traffic count of more than 30,000 vehicles per day, hydrant spacing shall average 500 feet on each side of the street and be arranged on an alternating basis.

c. Where new water mains are extended along streets where hydrants are not needed for protection of structures or similar fire problems, fire hydrants shall be provided at spacing not to exceed 1,000 feet to provide for transportation hazards.

d. Reduce by 50 feet for dead-end streets or roads.

e. One hydrant for each 1,000 gallons per minute or fraction thereof.

f. A 50-percent spacing increase shall be permitted where the building is equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1 of the *International Fire Code*.

g. A 25-percent spacing increase shall be permitted where the building is equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.2 or 903.3.1.3 of the *International Fire Code* or Section P2904 of the *International Residential Code*.

SECTION C105
REFERENCED STANDARDS

ICC	IFC—15	International Fire Code	C101.1, C103.1, Table C102.1
ICC	IRC—15	International Residential Code	Table C102.1

APPENDIX D
FIRE APPARATUS ACCESS ROADS

The provisions contained in this appendix are not mandatory unless specifically referenced in the adopting ordinance.

SECTION D101
GENERAL

D101.1 Scope. Fire apparatus access roads shall be in accordance with this appendix and all other applicable requirements of the *International Fire Code*.

SECTION D102
REQUIRED ACCESS

D102.1 Access and loading. Facilities, buildings or portions of buildings hereafter constructed shall be accessible to fire department apparatus by way of an *approved* fire apparatus access road with an asphalt, concrete or other *approved* driving surface capable of supporting the imposed load of fire apparatus weighing at least 75,000 pounds (34 050 kg).

SECTION D103
MINIMUM SPECIFICATIONS

D103.1 Access road width with a hydrant. Where a fire hydrant is located on a fire apparatus access road, the minimum road width shall be 26 feet (7925 mm), exclusive of shoulders (see Figure D103.1).

D103.2 Grade. Fire apparatus access roads shall not exceed 10 percent in grade.

Exception: Grades steeper than 10 percent as *approved* by the fire chief.

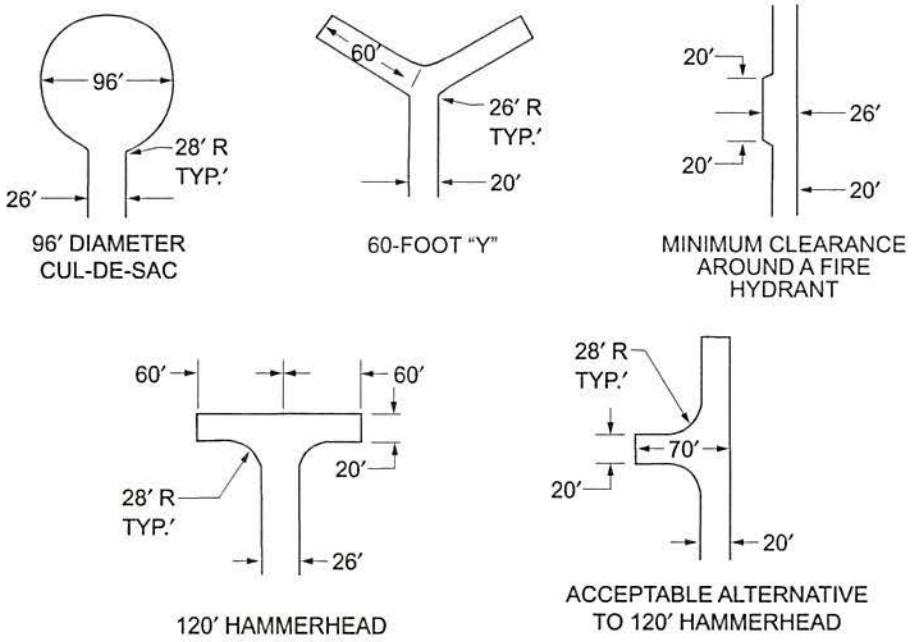
D103.3 Turning radius. The minimum turning radius shall be determined by the *fire code official*.

D103.4 Dead ends. Dead-end fire apparatus access roads in excess of 150 feet (45 720 mm) shall be provided with width and turnaround provisions in accordance with Table D103.4.

TABLE D103.4
REQUIREMENTS FOR DEAD-END FIRE APPARATUS ACCESS ROADS

LENGTH (feet)	WIDTH (feet)	TURNAROUNDS REQUIRED
0-150	20	None required
151-500	20	120-foot Hammerhead, 60-foot "Y" or 96-foot diameter cul-de-sac in accordance with Figure D103.1
501-750	26	120-foot Hammerhead, 60-foot "Y" or 96-foot diameter cul-de-sac in accordance with Figure D103.1
Over 750	Special approval required	

For SI: 1 foot = 304.8 mm.



For SI: 1 foot = 304.8 mm.

FIGURE D103.1
DEAD-END FIRE APPARATUS ACCESS ROAD TURNAROUND

D103.5 Fire apparatus access road gates. Gates securing the fire apparatus access roads shall comply with all of the following criteria:

1. Where a single gate is provided, the gate width shall be not less than 20 feet (6096 mm). Where a fire apparatus road consists of a divided roadway, the gate width shall be not less than 12 feet (3658 mm).
2. Gates shall be of the swinging or sliding type.
3. Construction of gates shall be of materials that allow manual operation by one person.
4. Gate components shall be maintained in an operative condition at all times and replaced or repaired when defective.
5. Electric gates shall be equipped with a means of opening the gate by fire department personnel for emergency access. Emergency opening devices shall be *approved* by the *fire code official*.
6. Methods of locking shall be submitted for approval by the *fire code official*.
7. Electric gate operators, where provided, shall be *listed* in accordance with UL 325.
8. Gates intended for automatic operation shall be designed, constructed and installed to comply with the requirements of ASTM F2200.

D103.6 Signs. Where required by the *fire code official*, fire apparatus access roads shall be marked with permanent NO PARKING—FIRE LANE signs complying with Figure D103.6. Signs shall have a minimum dimension of 12 inches (305 mm) wide by 18 inches (457 mm) high and have red letters on a white reflective background. Signs shall be posted on one or both sides of the fire apparatus road as required by Section D103.6.1 or D103.6.2.

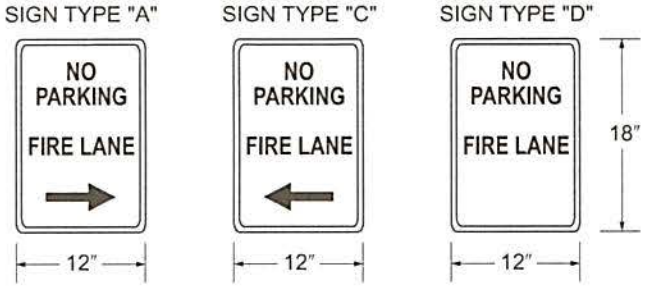


FIGURE D103.6
FIRE LANE SIGNS

D103.6.1 Roads 20 to 26 feet in width. Fire lane signs as specified in Section D103.6 shall be posted on both sides of fire apparatus access roads that are 20 to 26 feet wide (6096 to 7925 mm).

D103.6.2 Roads more than 26 feet in width. Fire lane signs as specified in Section D103.6 shall be posted on one side of fire apparatus access roads more than 26 feet wide (7925 mm) and less than 32 feet wide (9754 mm).

SECTION D104
COMMERCIAL AND INDUSTRIAL DEVELOPMENTS

D104.1 Buildings exceeding three stories or 30 feet in height. Buildings or facilities exceeding 30 feet (9144 mm) or three stories in height shall have at least two means of fire apparatus access for each structure.

D104.2 Buildings exceeding 62,000 square feet in area. Buildings or facilities having a gross *building area* of more than 62,000 square feet (5760 m^2) shall be provided with two separate and *approved* fire apparatus access roads.

Exception: Projects having a gross *building area* of up to 124,000 square feet (11 520 m^2) that have a single *approved* fire apparatus access road when all buildings are equipped throughout with *approved automatic sprinkler systems.*

D104.3 Remoteness. Where two fire apparatus access roads are required, they shall be placed a distance apart equal to not less than one half of the length of the maximum overall diagonal dimension of the lot or area to be served, measured in a straight line between accesses.

SECTION D105
AERIAL FIRE APPARATUS ACCESS ROADS

D105.1 Where required. Where the vertical distance between the grade plane and the highest roof surface exceeds 30 feet (9144 mm), approved aerial fire apparatus access roads shall be provided. For purposes of this section, the highest roof surface shall be determined by measurement to the eave of a pitched roof, the intersection of the roof to the exterior wall, or the top of parapet walls, whichever is greater.

D105.2 Width. Aerial fire apparatus access roads shall have a minimum unobstructed width of 26 feet (7925 mm), exclusive of shoulders, in the immediate vicinity of the building or portion thereof.

D105.3 Proximity to building. At least one of the required access routes meeting this condition shall be located within a minimum of 15 feet (4572 mm) and a maximum of 30 feet (9144 mm) from the building, and shall be positioned parallel to one entire side of the building. The side of the building on which the aerial fire apparatus access road is positioned shall be approved by the *fire code official*.

D105.4 Obstructions. Overhead utility and power lines shall not be located over the aerial fire apparatus access road or between the aerial fire apparatus road and the building. Other obstructions shall be permitted to be placed with the approval of the *fire code official*.

SECTION D106
MULTIPLE-FAMILY RESIDENTIAL DEVELOPMENTS

D106.1 Projects having more than 100 dwelling units. Multiple-family residential projects having more than 100 *dwelling units* shall be equipped throughout with two separate and *approved* fire apparatus access roads.

Exception: Projects having up to 200 *dwelling units* may have a single *approved* fire apparatus access road when all buildings, including nonresidential occupancies, are equipped throughout with *approved automatic sprinkler systems* installed in accordance with Section 903.3.1.1 or 903.3.1.2.

D106.2 Projects having more than 200 dwelling units. Multiple-family residential projects having more than 200 *dwelling units* shall be provided with two separate and *approved* fire apparatus access roads regardless of whether they are equipped with an *approved automatic sprinkler system.*

D106.3 Remoteness. Where two fire apparatus access roads are required, they shall be placed a distance apart equal to not less than one-half of the length of the maximum overall diagonal dimension of the property or area to be served, measured in a straight line between accesses.

SECTION D107
ONE- OR TWO-FAMILY RESIDENTIAL DEVELOPMENTS

D107.1 One- or two-family dwelling residential developments. Developments of one- or two-family dwellings where the number of *dwelling units* exceeds 30 shall be provided with two separate and *approved* fire apparatus access roads.

Exceptions:

1. Where there are more than 30 *dwelling units* on a single public or private fire apparatus access road and all *dwelling units* are equipped throughout with an *approved automatic sprinkler system* in accordance with Section 903.3.1.1, 903.3.1.2 or 903.3.1.3 of the *International Fire Code*, access from two directions shall not be required.
2. The number of *dwelling units* on a single fire apparatus access road shall not be increased unless fire apparatus access roads will connect with future development, as determined by the *fire code official.*

D107.2 Remoteness. Where two fire apparatus access roads are required, they shall be placed a distance apart equal to not less than one-half of the length of the maximum overall diagonal dimension of the property or area to be served, measured in a straight line between accesses.

SECTION D108
REFERENCED STANDARDS

ASTM	F2200—13	Standard Specification for Automated Vehicular Gate Construction	D103.5
ICC	IFC—15	International Fire Code	D101.1, D107.1
UL	325—02	Door, Drapery, Gate, Louver, and Window Operators and Systems, with Revisions through June 2013	D103.5

APPENDIX E
HAZARD CATEGORIES

This appendix is for information purposes and is not intended for adoption.

SECTION E101
GENERAL

E101.1 Scope. This appendix provides information, explanations and examples to illustrate and clarify the hazard categories contained in Chapter 50 of the *International Fire Code*. The hazard categories are based upon the DOL 29 CFR. Where numerical classifications are included, they are in accordance with nationally recognized standards.

This appendix should not be used as the sole means of hazardous materials classification.

SECTION E102
HAZARD CATEGORIES

E102.1 Physical hazards. Materials classified in this section pose a *physical hazard*.

E102.1.1 Explosives and blasting agents. The current UN/DOT classification system recognized by international authorities, the Department of Defense and others classifies all *explosives* as Class 1 materials. They are then divided into six separate divisions to indicate their relative hazard. There is not a direct correlation between the designations used by the old DOT system and those used by the current system nor is there correlation with the system (high and low) established by the Bureau of Alcohol, Tobacco, Firearms and Explosives (BATF). Table 5604.3 of the *International Fire Code* provides some guidance with regard to the current categories and their relationship to the old categories. Some items may appear in more than one division, depending on factors such as the degree of confinement or separation, by type of packaging, storage configuration or state of assembly.

In order to determine the level of hazard presented by *explosive materials*, testing to establish quantitatively their *explosive* nature is required. There are numerous test methods that have been used to establish the character of an *explosive material*. Standardized tests, required for finished goods containing *explosives* or *explosive materials* in a packaged form suitable for shipment or storage, have been established by UN/DOT and BATF. However, these tests do not consider key elements that should be examined in a manufacturing situation. In manufacturing operations, the condition and/or the state of a material may vary within the process. The in-process material classification and classification requirements for materials used in the manufacturing process may be different from the classification of the same material where found in finished goods depending on the stage of the process in which the material is found. A classification methodology must be used that recognizes the hazards commensurate with the application to the variable physical conditions as well as potential variations of physical character and type of *explosive* under consideration.

Test methods or guidelines for hazard classification of energetic materials used for in-process operations shall be *approved* by the *fire code official*. Test methods used shall be DOD, BATF, UN/DOT or other *approved* criteria. The results of such testing shall become a portion of the files of the jurisdiction and be included as an independent section of any Hazardous Materials Management Plan (HMMP) required by Section 5605.2.1 of the *International Fire Code*. Also see Section 104.7.2 of the *International Fire Code*.

Examples of materials in various Divisions are as follows:

1. Division 1.1 (High *Explosives*). Consists of *explosives* that have a mass explosion hazard. A mass explosion is one that affects almost the entire pile of material instantaneously. Includes substances that, where tested in accordance with *approved* methods, can be caused to detonate by means of a blasting cap where unconfined or will transition from *deflagration* to a *detonation* where confined or unconfined. Examples: dynamite, TNT, nitroglycerine, C-3, HMX, RDX, encased *explosives*, military ammunition.
2. Division 1.2 (Low *Explosives*). Consists of *explosives* that have a projection hazard, but not a mass explosion hazard. Examples: nondetonating encased *explosives*, military ammunition and the like.
3. Division 1.3 (Low *Explosives*). Consists of *explosives* that have a fire hazard and either a minor blast hazard or a minor projection hazard or both, but not a mass explosion hazard. The major hazard is radiant heat or violent burning, or both. Can be deflagrated where confined. Examples: smokeless powder, propellant *explosives*, display fireworks.
4. Division 1.4. Consists of *explosives* that pose a minor explosion hazard. The *explosive* effects are largely confined to the package and no projection of fragments of appreciable size or range is expected. An internal fire must not cause virtually instantaneous explosion of almost the entire contents of the package. Examples: squibs (nondetonating igniters), *explosive* actuators, *explosive* trains (low-level detonating cord).
5. Division 1.5 (Blasting Agents). Consists of very insensitive *explosives*. This division comprises substances that have a mass explosion hazard, but are so

insensitive that there is very little probability of initiation or of transition from burning to *detonation* under normal conditions of transport. Materials are not cap sensitive; however, they are mass detonating where provided with sufficient input. Examples: oxidizer and liquid fuel slurry mixtures and gels, ammonium nitrate combined with fuel oil.

6. Division 1.6. Consists of extremely insensitive articles that do not have a mass *explosive* hazard. This division comprises articles that contain only extremely insensitive detonating substances and that demonstrate a negligible probability of accidental initiation or propagation. Although this category of materials has been defined, the primary application is currently limited to military uses. Examples: Low vulnerability military weapons.

Explosives in each division are assigned a compatibility group letter by the Associate Administrator for Hazardous Materials Safety (DOT) based on criteria specified by DOTn 49 CFR. Compatibility group letters are used to specify the controls for the transportation and storage related to various materials to prevent an increase in hazard that might result if certain types of *explosives* were stored or transported together. Altogether, there are 35 possible classification codes for *explosives*, e.g., 1.1A, 1.3C, 1.4S, etc.

E102.1.2 Compressed gases. Examples include:

1. Flammable: acetylene, carbon monoxide, ethane, ethylene, hydrogen, methane. Ammonia will ignite and burn although its flammable range is too narrow for it to fit the definition of "Flammable gas."

   For binary mixtures where the hazardous component is diluted with a nonflammable gas, the mixture shall be categorized in accordance with CGA P-23.
2. Oxidizing: oxygen, ozone, oxides of nitrogen, chlorine and fluorine. Chlorine and fluorine do not contain oxygen but reaction with flammables is similar to that of oxygen.
3. *Corrosive*: ammonia, hydrogen chloride, fluorine.
4. Highly toxic: arsine, cyanogen, fluorine, germane, hydrogen cyanide, nitric oxide, phosphine, hydrogen selenide, stibine.
5. Toxic: chlorine, hydrogen fluoride, hydrogen sulfide, phosgene, silicon tetrafluoride.
6. Inert (chemically unreactive): argon, helium, krypton, neon, nitrogen, xenon.
7. Pyrophoric: diborane, dichloroborane, phosphine, silane.
8. Unstable (reactive): butadiene (unstabilized), ethylene oxide, vinyl chloride.

E102.1.3 Flammable and combustible liquids. Examples include:

1. Flammable liquids.

   Class IA liquids shall include those having *flash points* below 73°F (23°C) and having a *boiling point* at or below 100°F (38°C).

   Class IB liquids shall include those having *flash points* below 73°F (23°C) and having a *boiling point* at or above 100°F (38°C).

   Class IC liquids shall include those having *flash points* at or above 73°F (23°C) and below 100°F (38°C).
2. *Combustible liquids.*

   Class II liquids shall include those having *flash points* at or above 100°F (38°C) and below 140°F (60°C).

   Class IIIA liquids shall include those having *flash points* at or above 140°F (60°C) and below 200°F (93°C).

   Class IIIB liquids shall include those liquids having *flash points* at or above 200°F (93°C).

E102.1.4 Flammable solids. Examples include:

1. Organic solids: camphor, cellulose nitrate, naphthalene.
2. Inorganic solids: decaborane, lithium amide, phosphorous heptasulfide, phosphorous sesquisulfide, potassium sulfide, anhydrous sodium sulfide, sulfur.
3. Combustible metals (except dusts and powders): cesium, magnesium, zirconium.

E102.1.5 Combustible dusts and powders. Finely divided solids that could be dispersed in air as a dust cloud: wood sawdust, plastics, coal, flour, powdered metals (few exceptions).

E102.1.6 Combustible fibers. See Section 5202.1.

E102.1.7 Oxidizers. Examples include:

1. Gases: oxygen, ozone, oxides of nitrogen, fluorine and chlorine (reaction with flammables is similar to that of oxygen).
2. Liquids: bromine, hydrogen peroxide, nitric acid, perchloric acid, sulfuric acid.
3. Solids: chlorates, chromates, chromic acid, iodine, nitrates, nitrites, perchlorates, peroxides.

E102.1.7.1 Examples of liquid and solid oxidizers according to hazard.

Class 4: ammonium perchlorate (particle size greater than 15 microns), ammonium permanganate, guanidine nitrate, hydrogen peroxide solutions more than 91 percent by weight, perchloric acid solutions more than 72.5 percent by weight, potassium superoxide, tetranitromethane.

Class 3: ammonium dichromate, calcium hypochlorite (over 50 percent by weight), chloric acid (10 percent maximum concentration), hydrogen peroxide solutions (greater than 52 percent up to 91 percent), mono-(trichloro)-tetra-(monopotassium di-

chloro)-penta-s-triazinetrione, nitric acid, (fuming - more than 86 percent concentration), perchloric acid solutions (60 percent to 72 percent by weight), potassium bromate, potassium chlorate, potassium dichloro-s-triazinetrione (potassium dichloro-isocyanurate), potassium perchlorate (99 percent), potassium permanganate (greater than 97.5 percent), sodium bromate, sodium chlorate, sodium chlorite (over 40 percent by weight) and sodium dichloro-s-triazinetrione anhydrous (sodium dichloro-isocyanurate anhydrous).

Class 2: barium bromate, barium chlorate, barium hypochlorite, barium perchlorate, barium permanganate, 1-bromo-3-chloro-5, 5-dimethylhydantoin, calcium chlorate, calcium chlorite, calcium hypochlorite (50 percent or less by weight), calcium perchlorate, calcium permanganate, calcium peroxide (75 percent), chromium trioxide (chromic acid), copper chlorate, halane (1, 3-di-chloro-5, 5-dimethylhydantoin), hydrogen peroxide (greater than 27.5 percent up to 52 percent), lead perchlorate, lithium chlorate, lithium hypochlorite (more than 39 percent available chlorine), lithium perchlorate, magnesium bromate, magnesium chlorate, magnesium perchlorate, mercurous chlorate, nitric acid (more than 40 percent but less than 86 percent), perchloric acid solutions (more than 50 percent but less than 60 percent), potassium peroxide, potassium superoxide, silver peroxide, sodium chlorite (40 percent or less by weight), sodium perchlorate, sodium perchlorate monohydrate, sodium permanganate, sodium peroxide, sodium persulfate (99 percent), strontium chlorate, strontium perchlorate, thallium chlorate, urea hydrogen peroxide, zinc bromate, zinc chlorate and zinc permanganate.

Class 1: all inorganic nitrates (unless otherwise classified), all inorganic nitrites (unless otherwise classified), ammonium persulfate, barium peroxide, hydrogen peroxide solutions (greater than 8 percent up to 27.5 percent), lead dioxide, lithium hypochlorite (39 percent or less available chlorine), lithium peroxide, magnesium peroxide, manganese dioxide, nitric acid (40 percent concentration or less), perchloric acid solutions (less than 50 percent by weight), potassium dichromate, potassium monopersulfate (45 percent $KHSO_5$ or 90 percent triple salt), potassium percarbonate, potassium persulfate, sodium carbonate peroxide, sodium dichloro-s-triazinetrione dihydrate, sodium dichromate, sodium perborate (anhydrous), sodium perborate monohydrate, sodium perborate tetra-hydrate, sodium percarbonate, strontium peroxide, trichloro-s-triazinetrione (trichloroisocyanuric acid) and zinc peroxide.

E102.1.8 Organic peroxides. Organic peroxides contain the double oxygen or peroxy (-o-o) group. Some are flammable compounds and subject to explosive decomposition. They are available as:

1. Liquids.
2. Pastes.
3. Solids (usually finely divided powders).

E102.1.8.1 Classification of organic peroxides according to hazard.

Unclassified: Unclassified organic peroxides are capable of *detonation* and are regulated in accordance with Chapter 56 of the *International Fire Code*.

Class I: acetyl cyclohexane sulfonyl 60-65 percent concentration by weight, fulfonyl peroxide, benzoyl peroxide over 98 percent concentration, t-butyl hydroperoxide 90 percent, t-butyl peroxyacetate 75 percent, t-butyl peroxyisopropylcarbonate 92 percent, diisopropyl peroxydicarbonate 100 percent, di-n-propyl peroxydicarbonate 98 percent, and di-n-propyl peroxydicarbonate 85 percent.

Class II: acetyl peroxide 25 percent, t-butyl hydroperoxide 70 percent (with DTBP and t-BuOH diluents), t-butyl peroxybenzoate 98 percent, t-butyl peroxy-2-ethylhexanoate 97 percent, t-butyl peroxyisobutyrate 75 percent, t-butyl peroxyisopropyl-carbonate 75 percent, t-butyl peroxypivalate 75 percent, dybenzoyl peroxydicarbonate 85 percent, di-sec-butyl peroxydicarbonate 98 percent, di-sec-butyl peroxydicarbonate 75 percent, 1,1-di-(t-butylperoxy)-3,5,5-trimethyecyclohexane 95 percent, di-(2-ethythexyl) peroxydicarbonate 97 percent, 2,5-dymethyl-2-5 di (benzoylperoxy) hexane 92 percent, and peroxyacetic acid 43 percent.

Class III: acetyl cyclohexane sulfonal peroxide 29 percent, benzoyl peroxide 78 percent, benzoyl peroxide paste 55 percent, benzoyl peroxide paste 50 percent peroxide/50 percent butylbenzylphthalate diluent, cumene hydroperoxide 86 percent, di-(4-butylcyclohexyl) peroxydicarbonate 98 percent, t-butyl peroxy-2-ethylhexanoate 97 percent, t-butyl peroxyneodecanoate 75 percent, decanoyl peroxide 98.5 percent, di-t-butyl peroxide 99 percent, 1,1-di-(t-butylperoxy)3,5,5-trimethylcyclohexane 75 percent, 2,4-dichlorobenzoyl peroxide 50 percent, diisopropyl peroxydicarbonate 30 percent, 2,-5-dimethyl-2,5-di-(2-ethylhexanolyperoxy)-hexane 90 percent, 2,5-dimethyl-2,5-di-(t-butylperoxy) hexane 90 percent and methyl ethyl ketone peroxide 9 percent active oxygen diluted in dimethyl phthalate.

Class IV: benzoyl peroxide 70 percent, benzoyl peroxide paste 50 percent peroxide/15 percent water/35 percent butylphthalate diluent, benzoyl peroxide slurry 40 percent, benzoyl peroxide powder 35 percent, t-butyl hydroperoxide 70 percent, (with water diluent), t-butyl peroxy-2-ethylhexanoate 50 percent, decumyl peroxide 98 percent, di-(2-ethylhexal) peroxydicarbonate 40 percent, laurel peroxide 98 percent, p-methane hydroperoxide 52.5 percent, methyl ethyl ketone peroxide 5.5 percent active oxygen and methyl ethyl ketone peroxide 9 percent active oxygen diluted in water and glycols.

Class V: benzoyl peroxide 35 percent, 1,1-di-t-butyl peroxy 3,5,5-trimethylcyclohexane 40 percent, 2,5-di-(t-butyl peroxy) hexane 47 percent and 2,4-pentanedione peroxide 4 percent active oxygen.

E102.1.9 Pyrophoric materials. Examples include:

1. Gases: diborane, phosphine, silane.
2. Liquids: diethylaluminum chloride, di-ethylberyllium, diethylphosphine, diethylzinc, dimethylarsine, triethylaluminum etherate, tri-ethylbismuthine, triethylboron, trimethylaluminum, trimethylgallium.
3. Solids: cesium, hafnium, lithium, white or yellow phosphorous, plutonium, potassium, rubidium, sodium, thorium.

E102.1.10 Unstable (reactive) materials. Examples include:

Class 4: acetyl peroxide, dibutyl peroxide, dinitrobenzene, ethyl nitrate, peroxyacetic acid and picric acid (dry) trinitrobenzene.

Class 3: hydrogen peroxide (greater than 52 percent), hydroxylamine, nitromethane, paranitroaniline, perchloric acid and tetrafluoroethylene monomer.

Class 2: acrolein, acrylic acid, hydrazine, methacrylic acid, sodium perchlorate, styrene and vinyl acetate.

Class 1: acetic acid, hydrogen peroxide 35 percent to 52 percent, paraldehyde and tetrahydrofuran.

E102.1.11 Water-reactive materials. Examples include:

Class 3: aluminum alkyls such as triethylaluminum, isobutylaluminum and trimethylaluminum; bromine pentafluoride, bromine trifluoride, chlorodiethylaluminium and diethylzinc.

Class 2: calcium carbide, calcium metal, cyanogen bromide, lithium hydride, methyldichlorosilane, potassium metal, potassium peroxide, sodium metal, sodium peroxide, sulfuric acid and trichlorosilane.

Class 1: acetic anhydride, sodium hydroxide, sulfur monochloride and titanium tetrachloride.

E102.1.12 Cryogenic fluids. The cryogenics listed will exist as *compressed gases* where they are stored at ambient temperatures.

1. Flammable: carbon monoxide, deuterium (heavy hydrogen), ethylene, hydrogen, methane.
2. Oxidizing: fluorine, nitric oxide, oxygen.
3. *Corrosive*: fluorine, nitric oxide.
4. Inert (chemically unreactive): argon, helium, krypton, neon, nitrogen, xenon.
5. Highly toxic: fluorine, nitric oxide.

E102.2 Health hazards. Materials classified in this section pose a *health hazard*.

E102.2.1 Highly toxic materials. Examples include:

1. Gases: arsine, cyanogen, diborane, fluorine, germane, hydrogen cyanide, nitric oxide, nitrogen dioxide, ozone, phosphine, hydrogen selenide, stibine.
2. Liquids: acrolein, acrylic acid, 2-chloroethanol (ethylene chlorohydrin), hydrazine, hydrocyanic acid, 2-methylaziridine (propylenimine), 2-methyl-acetonitrile (acetone cyanohydrin), methyl ester isocyanic acid (methyl isocyanate), nicotine, tetranitromethane and tetraethylstannane (tetraethyltin).
3. Solids: (aceto) phenylmercury (phenyl mercuric acetate), 4-aminopyridine, arsenic pentoxide, arsenic trioxide, calcium cyanide, 2-chloroacetophenone, aflatoxin B, decaborane(14), mercury (II) bromide (mercuric bromide), mercury (II) chloride (*corrosive* mercury chloride), pentachlorophenol, methyl parathion, phosphorus (white) and sodium azide.

E102.2.2 Toxic materials. Examples include:

1. Gases: boron trichloride, boron trifluoride, chlorine, chlorine trifluoride, hydrogen fluoride, hydrogen sulfide, phosgene, silicon tetrafluoride.
2. Liquids: acrylonitrile, allyl alcohol, alpha-chlorotoluene, aniline, 1-chloro-2,3-epoxypropane, chloroformic acid (allyl ester), 3-chloropropene (allyl chloride), o-cresol, crotonaldehyde, dibromomethane, diisopropylamine, diethyl ester sulfuric acid, dimethyl ester sulfuric acid, 2-furaldehyde (furfural), furfural alcohol, phosphorus chloride, phosphoryl chloride (phosphorus oxychloride) and thionyl chloride.
3. Solids: acrylamide, barium chloride, barium (II) nitrate, benzidine, p-benzoquinone, beryllium chloride, cadmium chloride, cadmium oxide, chloroacetic acid, chlorophenylmercury (phenyl mercuric chloride), chromium (VI) oxide (chromic acid, solid), 2,4-dinitrotoluene, hydroquinone, mercury chloride (calomel), mercury (II) sulfate (mercuric sulfate), osmium tetroxide, oxalic acid, phenol, P-phenylenediamine, phenylhydrazine, 4-phenylmorpholine, phosphorus sulfide, potassium fluoride, potassium hydroxide, selenium (IV) disulfide and sodium fluoride.

E102.2.3 Corrosives. Examples include:

1. Acids: Examples: chromic, formic, hydrochloric (muriatic) greater than 15 percent, hydrofluoric, nitric (greater than 6 percent, perchloric, sulfuric (4 percent or more).
2. Bases (alkalis): hydroxides-ammonium (greater than 10 percent), calcium, potassium (greater than 1 percent), sodium (greater than 1 percent); certain carbonates-potassium.
3. Other *corrosives*: bromine, chlorine, fluorine, iodine, ammonia.

Note: *Corrosives* that are oxidizers, e.g., nitric acid, chlorine, fluorine; or are *compressed gases*, e.g., ammonia, chlorine, fluorine; or are water-reactive, e.g., concentrated sulfuric acid, sodium hydroxide, are *physical hazards* in addition to being *health hazards*.

SECTION E103
EVALUATION OF HAZARDS

E103.1 Degree of hazard. The degree of hazard present depends on many variables that should be considered individually and in combination. Some of these variables are as shown in Sections E103.1.1 through E103.1.5.

E103.1.1 Chemical properties of the material. Chemical properties of the material determine self reactions and reactions that could occur with other materials. Generally, materials within subdivisions of hazard categories will exhibit similar chemical properties. However, materials with similar chemical properties could pose very different hazards. Each individual material should be researched to determine its hazardous properties and then considered in relation to other materials that it might contact and the surrounding environment.

E103.1.2 Physical properties of the material. Physical properties, such as whether a material is a solid, liquid or gas at ordinary temperatures and pressures, considered along with chemical properties will determine requirements for containment of the material. Specific gravity (weight of a liquid compared to water) and vapor density (weight of a gas compared to air) are both physical properties that are important in evaluating the hazards of a material.

E103.1.3 Amount and concentration of the material. The amount of material present and its concentration must be considered along with physical and chemical properties to determine the magnitude of the hazard. Hydrogen peroxide, for example, is used as an antiseptic and a hair bleach in low concentrations (approximately 8 percent in water solution). Over 8 percent, hydrogen peroxide is classed as an oxidizer and is toxic. Above 90 percent, it is a Class 4 oxidizer "that can undergo an explosive reaction when catalyzed or exposed to heat, shock or friction," a definition that incidentally also places hydrogen peroxide over 90-percent concentration in the unstable (reactive) category. Small amounts at high concentrations could present a greater hazard than large amounts at low concentrations.

E103.1.3.1 Mixtures. Gases—toxic and highly toxic gases include those gases that have an LC_{50} of 2,000 parts per million (ppm) or less when rats are exposed for a period of 1 hour or less. To maintain consistency with the definitions for these materials, exposure data for periods other than 1 hour must be normalized to 1 hour. To classify mixtures of *compressed gases* that contain one or more toxic or highly toxic components, the LC_{50} of the mixture must be determined. Mixtures that contain only two components are binary mixtures. Those that contain more than two components are multicomponent mixtures. Where two or more hazardous substances (components) having an LC_{50} below 2,000 ppm are present in a mixture, their combined effect, rather than that of the individual substance components, must be considered. In the absence of information to the contrary, the effects of the hazards present must be considered as additive. Exceptions to the above rule could be made when there is a good reason to believe that the principal effects of the different harmful substances (components) are not additive.

For binary mixtures where the hazardous component is diluted with a nontoxic gas such as an inert gas, the LC_{50} of the mixture is estimated by use of the methodology contained in CGA P-20. The hazard zones specified in CGA P-20 are applicable for DOTn purposes and shall not be used for hazard classification.

E103.1.4 Actual use, activity or process involving the material. The definition of handling, storage and use in *closed systems* refers to materials in packages or containers. Dispensing and use in open containers or systems describes situations where a material is exposed to ambient conditions or vapors are liberated to the atmosphere. Dispensing and use in *open systems*, then, are generally more hazardous situations than handling, storage or use in *closed systems*. The actual use or process could include heating, electric or other sparks, catalytic or reactive materials and many other factors that could affect the hazard and must therefore be thoroughly analyzed.

E103.1.5 Surrounding conditions. Conditions such as other materials or processes in the area, type of construction of the structure, fire protection features (e.g., *fire walls*, sprinkler systems, alarms, etc.), occupancy (use) of adjoining areas, normal temperatures, exposure to weather, etc., must be taken into account in evaluating the hazard.

E103.2 Evaluation questions. The following are sample evaluation questions:

1. What is the material? Correct identification is important; exact spelling is vital. Check labels, MSDS, ask responsible persons, etc.
2. What are the concentration and strength?
3. What is the physical form of the material? Liquids, gases and finely divided solids have differing requirements for spill and leak control and containment.
4. How much material is present? Consider in relation to permit amounts, *maximum allowable quantity per control area* (from Group H occupancy requirements), amounts that require detached storage and overall magnitude of the hazard.
5. What other materials (including furniture, equipment and building components) are close enough to interact with the material?
6. What are the likely reactions?
7. What is the activity involving the material?
8. How does the activity impact the hazardous characteristics of the material? Consider vapors released or hazards otherwise exposed.
9. What must the material be protected from? Consider other materials, temperature, shock, pressure, etc.
10. What effects of the material must people and the environment be protected from?
11. How can protection be accomplished? Consider:
    11.1. Proper containers and equipment.

11.2. Separation by distance or construction.

11.3. Enclosure in cabinets or rooms.

11.4. Spill control, drainage and containment.

11.5. Control systems-ventilation, special electrical, detection and alarm, extinguishment, explosion venting, limit controls, exhaust scrubbers and excess flow control.

11.6. Administrative (operational) controls-signs, ignition source control, security, personnel training, established procedures, storage plans and emergency plans.

Evaluation of the hazard is a strongly subjective process; therefore, the person charged with this responsibility must gather as much relevant data as possible so that the decision will be objective and within the limits prescribed in laws, policies and standards.

It could be necessary to cause the responsible persons in charge to have tests made by qualified persons or testing laboratories to support contentions that a particular material or process is or is not hazardous. See Section 104.7.2 of the *International Fire Code*.

SECTION E104
REFERENCED STANDARDS

CGA (2009)	P-20—	Standard for Classification of Toxic Mixtures	E103.1.3.1
CGA (2008)	P-23—	Standard for Categorizing Gas Mixtures Containing Flammable and Nonflammable Components	E102.1.2
ICC	IFC—15	International Fire Code	E101.1, E102.1.1, E102.1.8.1, E103.2

APPENDIX F
HAZARD RANKING

The provisions contained in this appendix are not mandatory unless specifically referenced in the adopting ordinance.

SECTION F101
GENERAL

F101.1 Scope. Assignment of levels of hazards to be applied to specific hazard classes as required by NFPA 704 shall be in accordance with this appendix. The appendix is based on application of the degrees of hazard as defined in NFPA 704 arranged by hazard class as for specific categories defined in Chapter 2 of the *International Fire Code* and used throughout.

F101.2 General. The hazard rankings shown in Table F101.2 have been established by using guidelines found within NFPA 704. As noted in Section 4.2 of NFPA 704, there could be specific reasons to alter the degree of hazard assigned to a specific material; for example, ignition temperature, flammable range or susceptibility of a container to rupture by an internal combustion explosion or to metal failure while under pressure or because of heat from external fire. As a result, the degree of hazard assigned for the same material can vary when assessed by different people of equal competence.

The hazard rankings assigned to each class represent reasonable minimum hazard levels for a given class based on the use of criteria established by NFPA 704. Specific cases of use or storage may dictate the use of higher degrees of hazard in certain cases.

SECTION F102
REFERENCED STANDARDS

ICC	IFC—15	International Fire Code	F101.1
NFPA	704—12	Identification of the Hazards of Materials for Emergency Response	F101.1, F101.2

TABLE F101.2
FIRE FIGHTER WARNING PLACARD DESIGNATIONS BASED ON HAZARD CLASSIFICATION CATEGORIES

HAZARD CATEGORY	DESIGNATION
Combustible liquid II	F2
Combustible liquid IIIA	F2
Combustible liquid IIIB	F1
Combustible dust	F4
Combustible fiber	F3
Cryogenic flammable	F4, H3
Cryogenic oxidizing	OX, H3
Explosive	R4
Flammable solid	F2
Flammable gas (gaseous)	F4
Flammable gas (liquefied)	F4
Flammable liquid IA	F4
Flammable liquid IB	F3
Flammable liquid IC	F3
Organic peroxide, UD	R4
Organic peroxide I	F4, R3
Organic peroxide II	F3, R3
Organic peroxide III	F2, R2
Organic peroxide IV	F1, R1
Organic peroxide V	None
Oxidizing gas (gaseous)	OX
Oxidizing gas (liquefied)	OX
Oxidizer 4	OX4
Oxidizer 3	OX3
Oxidizer 2	OX2
Oxidizer 1	OX1
Pyrophoric gases	F4
Pyrophoric solids, liquids	F3
Unstable reactive 4D	R4
Unstable reactive 3D	R4
Unstable reactive 3N	R2
Unstable reactive 2	R2
Unstable reactive 1	None
Water reactive 3	W3
Water reactive 2	W2
Corrosive	H3, COR
Toxic	H3
Highly toxic	H4

F—Flammable category.
R—Reactive category.
H—Health category.
W—Special hazard: water reactive.
OX—Special hazard: oxidizing properties.
COR—Corrosive.
UD—Unclassified detonable material.
4D—Class 4 detonable material.
3D—Class 3 detonable material.
3N—Class 3 nondetonable material.

APPENDIX G

CRYOGENIC FLUIDS—WEIGHT AND VOLUME EQUIVALENTS

This appendix is for information purposes and is not intended for adoption.

SECTION G101 GENERAL

G101.1 Scope. This appendix is used to convert from liquid to gas for *cryogenic fluids*.

G101.2 Conversion. Table G101.2 shall be used to determine the equivalent amounts of *cryogenic fluids* in either the liquid or gas phase.

G101.2.1 Use of the table. To use Table G101.2, read horizontally across the line of interest. For example, to determine the number of cubic feet of gas contained in 1.0 gallon (3.785 L) of liquid argon, find 1.000 in the column entitled "Volume of Liquid at Normal *Boiling Point*." Reading across the line under the column entitled "Volume of Gas at NTP" (70°F and 1 atmosphere/14.7 psia), the value of 112.45 cubic feet (3.184 m^3) is found.

G101.2.2 Other quantities. If other quantities are of interest, the numbers obtained can be multiplied or divided to obtain the quantity of interest. For example, to determine the number of cubic feet of argon gas contained in a volume of 1,000 gallons (3785 L) of liquid argon at its normal *boiling point*, multiply 112.45 by 1,000 to obtain 112,450 cubic feet (3184 m^3).

TABLE G101.2
WEIGHT AND VOLUME EQUIVALENTS FOR COMMON CRYOGENIC FLUIDS

CRYOGENIC FLUID	WEIGHT OF LIQUID OR GAS		VOLUME OF LIQUID AT NORMAL BOILING POINT		VOLUME OF GAS AT NTP	
	Pounds	Kilograms	Liters	Gallons	Cubic feet	Cubic meters
Argon	1.000	0.454	0.326	0.086	9.67	0.274
	2.205	1.000	0.718	0.190	21.32	0.604
	3.072	1.393	1.000	0.264	29.71	0.841
	11.628	5.274	3.785	1.000	112.45	3.184
	10.340	4.690	3.366	0.889	100.00	2.832
	3.652	1.656	1.189	0.314	35.31	1.000
Helium	1.000	0.454	3.631	0.959	96.72	2.739
	2.205	1.000	8.006	2.115	213.23	6.038
	0.275	0.125	1.000	0.264	26.63	0.754
	1.042	0.473	3.785	1.000	100.82	2.855
	1.034	0.469	3.754	0.992	100.00	2.832
	0.365	0.166	1.326	0.350	35.31	1.000
Hydrogen	1.000	0.454	6.409	1.693	191.96	5.436
	2.205	1.000	14.130	3.733	423.20	11.984
	0.156	0.071	1.000	0.264	29.95	0.848
	0.591	0.268	3.785	1.000	113.37	3.210
	0.521	0.236	3.339	0.882	100.00	2.832
	0.184	0.083	1.179	0.311	35.31	1.000
Oxygen	1.000	0.454	0.397	0.105	12.00	0.342
	2.205	1.000	0.876	0.231	26.62	0.754
	2.517	1.142	1.000	0.264	30.39	0.861
	9.527	4.321	3.785	1.000	115.05	3.250
	8.281	3.756	3.290	0.869	100.00	2.832
	2.924	1.327	1.162	0.307	35.31	1.000
Nitrogen	1.000	0.454	0.561	0.148	13.80	0.391
	2.205	1.000	1.237	0.327	30.43	0.862
	1.782	0.808	1.000	0.264	24.60	0.697
	6.746	3.060	3.785	1.000	93.11	2.637
	7.245	3.286	4.065	1.074	100.00	2.832
	2.558	1.160	1.436	0.379	35.31	1.000
LNG[a]	1.000	0.454	1.052	0.278	22.968	0.650
	2.205	1.000	2.320	0.613	50.646	1.434
	0.951	0.431	1.000	0.264	21.812	0.618
	3.600	1.633	3.785	1.000	82.62	2.340
	4.356	1.976	4.580	1.210	100.00	2.832
	11.501	5.217	1.616	0.427	35.31	1.000

For SI: 1 pound = 0.454 kg, 1 gallon = 3.785 L, 1 cubic foot = 0.02832 m^3, °C = [(°F)-32]/1.8, 1 pound per square inch atmosphere = 6.895 kPa.

a. The values listed for liquefied natural gas (LNG) are "typical" values. LNG is a mixture of hydrocarbon gases, and no two LNG streams have exactly the same composition.

APPENDIX H

HAZARDOUS MATERIALS MANAGEMENT PLAN (HMMP) AND HAZARDOUS MATERIALS INVENTORY STATEMENT (HMIS) INSTRUCTIONS

The provisions contained in this appendix are adopted as part of this code.

SECTION H101 HMMP

H101.1 Part A (See Example Format in Figure 1).

1. Fill out items and sign the declaration.
2. Part A of this section is required to be updated and submitted annually, or within 30 days of a process or management change.

H101.2 Part B–General Facility Description/Site Plan (See Example Format in Figure 2).

1. Provide a site plan on $8^1/_2$ by 11 inch (215 mm by 279 mm) paper, showing the locations of all buildings, structures, outdoor chemical control or storage and use areas, parking lots, internal roads, storm and sanitary sewers, wells and adjacent property uses. Indicate the approximate scale, northern direction and date the drawing was completed.

H101.3 Part C–Facility Storage Map–Confidential Information (See Example Format in Figure 3).

1. Provide a floor plan of each building identified on the site plan as containing hazardous materials on $8^1/_2$-inch by 11-inch (215 mm by 279 mm) paper, identifying the northern direction, and showing the location of each storage and use area.
2. Identify storage and use areas, including hazard waste storage areas.
3. Show the following:
    - 3.1. Accesses to each storage and use area.
    - 3.2. Location of emergency equipment.
    - 3.3. Location where liaison will meet emergency responders.
    - 3.4. Facility evacuation meeting point locations.
    - 3.5. The general purpose of other areas within the building.
    - 3.6. Location of all aboveground and underground tanks to include sumps, vaults, below-grade treatment systems, piping, etc.
    - 3.7. Show hazard classes in each area.
    - 3.8. Show locations of all Group H occupancies, control areas, and exterior storage and use areas.
    - 3.9. Show emergency exits.

SECTION H102 HMIS

H102.1 Inventory statement contents.

1. HMIS Summary Report (see Example Format in Figure 4).
    - 1.1. Complete a summary report for each control area and Group H occupancy.
    - 1.2. The storage summary report includes the HMIS Inventory Report amounts in storage, use-closed and use-open conditions.
    - 1.3. Provide separate summary reports for storage, use-closed and use-open conditions.
    - 1.4. IBC/IFC Hazard Class.
    - 1.5. Inventory Amount. [Solid (lb), Liquid (gal), Gas (cu ft, gal or lbs)].
    - 1.6. IBC/IFC Maximum Allowable Quantity per control area (MAQ). (If applicable, double MAQ for sprinkler protection and/or storage in cabinets. For wholesale and retail sales occupancies, go to Tables 5003.11.1 and 5704.3.4.1 of the *International Fire Code* for MAQs.).
2. HMIS Inventory Report (see Example Format in Figure 5).
    - 2.1. Complete an inventory report by listing products by location.
    - 2.2. Product Name.
    - 2.3. Components. (For mixtures specify percentages of major components if available.)
    - 2.4. Chemical Abstract Service (CAS) Number. (For mixtures list CAS Numbers of major components if available.)
    - 2.5. Location. (Identify the control area or, if it is a Group H occupancy, provide the classification, such as H-2, H-3, etc.)
    - 2.6. Container with a capacity of greater than 55 gallons (208 L). (If product container, vessel or tank could exceed 55 gallons, indicate yes in column.)
    - 2.7. Hazard Classification. (List applicable classifications for each product.)
    - 2.8. Stored. (Amount of product in storage conditions.)

2.9. Closed. (Amount of product in use-closed systems.)

2.10. Open. (Amount of product in use-open systems.)

Facilities that have prepared, filed and submitted a Tier II Inventory Report required by the U.S. Environmental Protection Agency (USEPA) or required by a state that has secured USEPA approval for a similar form shall be deemed to have complied with this section.

SECTION H103
EMERGENCY PLAN

1. Emergency Notification. (See Example Format in Figure 6.)
2. Where OSHA or state regulations require a facility to have either an Emergency Action Plan (EAP) or an Emergency Response Plan (ERP), the EAP or ERP shall be included as part of the HMMP.

SECTION H104
REFERENCED STANDARDS

ICC	IBC—15	International Building Code	H102.1
ICC	IFC—15	International Fire Code	H102.1

FIGURE 1
HAZARDOUS MATERIALS MANAGEMENT PLAN
SECTION I: FACILITY DESCRIPTION

1. Business Name:_____ Phone:_____
   Address:_____

2. Person Responsible for the Business

Name:	Title:	Phone:
_____	_____	_____

3. Emergency Contacts:

Name:	Title:	Home Number:	Work Number:
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

4. Person Responsible for the Application/Principal Contact:

Name:	Title:	Phone:
_____	_____	_____

5. Principal Business Activity:

_____
_____
_____

6. Number of Employees:_____

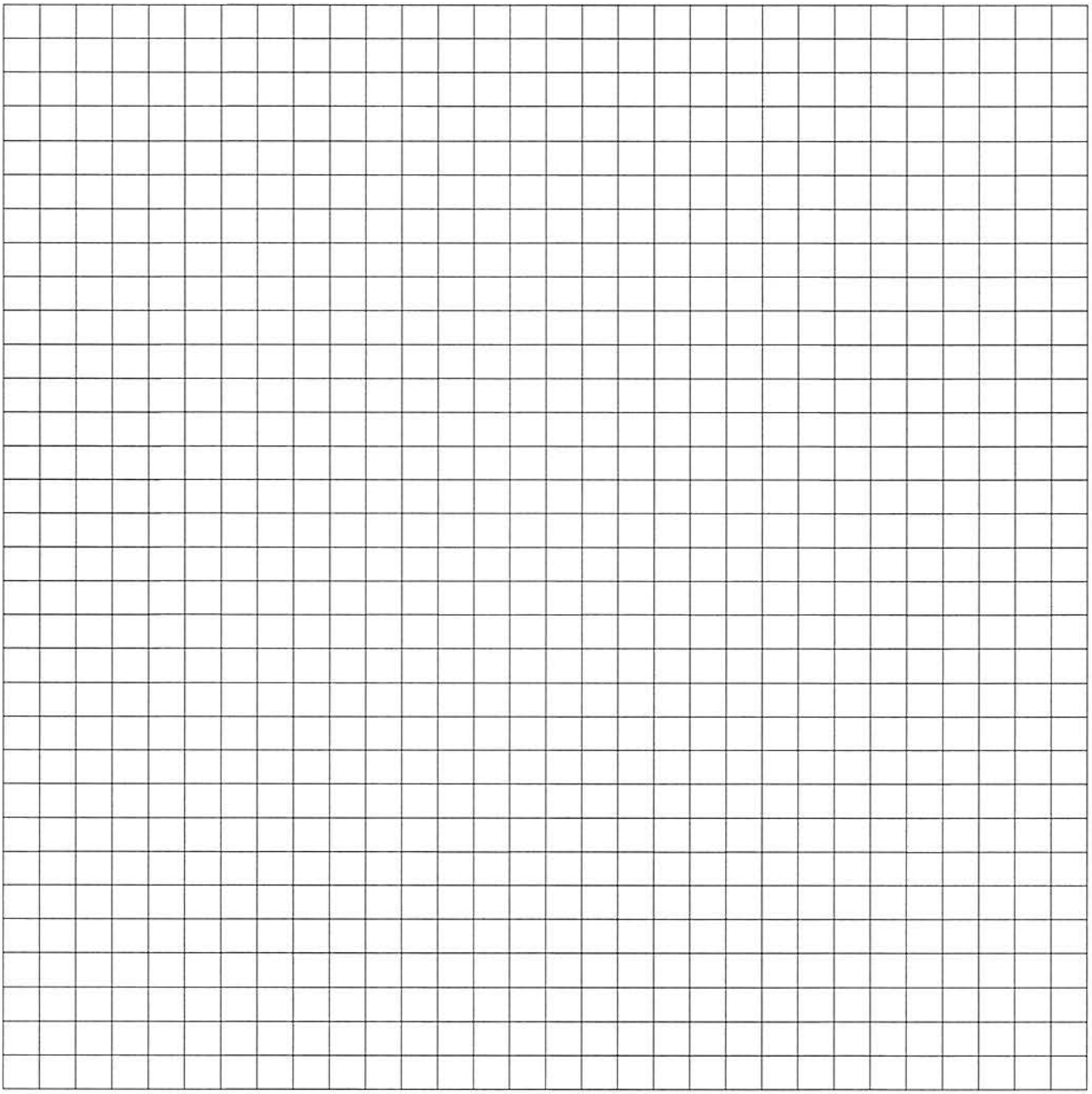
7. Number of Shifts: _____
   a. Number of Employees per Shift:

_____
_____
_____

8. Hours of Operation: _____

FIGURE 2
HAZARDOUS MATERIALS MANAGEMENT PLAN SECTION I: FACILITY DESCRIPTION

FIGURE 3
HAZARDOUS MATERIALS MANAGEMENT PLAN SECTION I: FACILITY DESCRIPTION PART C—FACILITY MAP



Business Name	Date
Address	Page of

FIGURE 4
SECTION II—HAZARDOUS MATERIALS INVENTORY STATEMENT (HMIS) HMIS SUMMARY REPORT[a] (Storage[b] Conditions)[c]

IBC/IFC HAZARD CLASS	HAZARD CLASS	INVENTORY AMOUNT			IBC/IFC MAXIMUM ALLOWABLE QUANTITY[d]		
	(Abbrev)	Solid (lb)	Liquid (gal)	Gas (cu ft, gal, lb)	Solid (lb)	Liquid (gal)	Gas (cu ft, gal, lb)
Combustible Liquid	C2		5			120	
	C3A					330	
	C3B		6			13,200	
Combustible Fiber	Loose/Baled						
Cryogenics, Flammable	Cryo-Flam					45	
Cryogenic, Oxidizing	Cryo-OX					45	
Flammable Gas	FLG						
(Gaseous)				150			1,000
(Liquefied)						30	
Flammable Liquid	F1A					30	
	F1B & F1C		5			120	
Combination (1A, 1B, 1C)			5			120	
Flammable Solid	FLS				125		
Organic Peroxide	OPU				0		
	OP1				5		
	OP2				50		
	OP3				125		
	OP4				NL		
	OP5				NL		
Oxidizer	OX4				0		
	OX3				10		
	OX2				250		
	OX1				4,000		

a. Complete a summary report for each control area and Group H occupancy.
b. Storage = storage + use-closed + use-open systems.
c. Separate reports are required for use-closed and use-open systems.
d. Include increases for sprinklefrs or storage in cabinets, if applicable.
(This is an example; add additional hazard classes as needed.)

FIGURE 5
SECTION II — HAZARDOUS MATERIALS INVENTORY STATEMENT (HMIS) HMIS INVENTORY REPORT
(Sort Products Alphabetically by Location of Product and then Alphabetically by Product Name)

Product Name (Components)[c]	CAS Number	Location[a]	Container > 55 gal[b]	Haz Class 1	Haz Class 2	Haz Class 3	Stored (lbs)	Stored (gal)	Stored (gas)[d]	Closed (lbs)	Closed (gal)	Closed gas[d]	Open (lbs)	Open (gal)
ACETYLENE (Acetylene gas)	74-86-2	Control Area 1		FLG	UR2				150					
BLACK AEROSOL SPRAY PAINT (Mixture)	Mixture	Control Area 1		A-L3			24							
GASOLINE, UNLEADED (Gasoline-Mixture) Methyl-t-Butyl-Ether-15% Diisopropyl Ether-7% Ethanol-11% Toluene-12% Xylene-11%	8006-61-9 1634-04-4 108-20-3 64-17-5 108-88-3 1330-20-7	Control Area 1		F1B				5						
MOTOR OIL-10W40 (Hydrotreated Heavy Paraffinic Distillate-85%; Additives-20%)	64742-54-7 Mixture	Control Area 1		C3B				3						
DIESEL (Diesel-99-100%; Additives)	68476-34-6 Proprietary	Control Area 2	Yes	C2				225						
TRANSMISSION FLUID (Oil-Solvent-Neutral; Performance Additives)	64742-65-0	Control Area 2		C3B				3						
OXYGEN, GAS (Oxygen)	7782-44-7	H-3		OXG					5,000					

a. Identify the control area or, if it is a Group H occupancy, provide the classification, such as H-2, H-3, etc.
b. If the product container, vessel or tank could exceed 55 gallons, indicate yes in the column.
c. Specify percentages of main components if available.
d. In cubic feet, gallons or pounds.
(This is an example; add additional hazard classes as needed.)

FIGURE 6
HAZARDOUS MATERIALS MANAGEMENT PLAN
SECTION III: EMERGENCY PLAN

1. In the event of an emergency, the following shall be notified:
   a. Facility Liaison

Name	Title	Home Number	Work Number

b. Agency

Agency	Contact	Phone Number
Fire Department		
LEPC		
Other		

APPENDIX I

FIRE PROTECTION SYSTEMS—NONCOMPLIANT CONDITIONS

Deleted.

APPENDIX J
BUILDING INFORMATION SIGN

The provisions contained in this appendix are not mandatory unless specifically referenced in the adopting ordinance.

SECTION J101
GENERAL

J101.1 Scope. New buildings shall have a building information sign(s) that shall comply with Sections J101.1.1 through J101.7. Existing buildings shall be brought into conformance with Sections J101.1 through J101.9 when one of the following occurs:

1. The fire department conducts an annual inspection intended to verify compliance with this section, or any required inspection.
2. When a change in use or occupancy has occurred.

Exceptions:

1. Group U occupancies.
2. One- and two-family dwellings.

J101.1.1 Sign location. The building information sign shall be placed at one of the following locations:

1. Upon the entry door or sidelight at a minimum height of 42 inches (1067 mm) above the walking surface on the address side of the building or structure.
2. Upon the exterior surface of the building or structure on either side of the entry door, not more than 3 feet (76 mm) from the entrance door, at a minimum height of 42 inches (1067 mm) above the walking surface on the address side of the building or structure.
3. Conspicuously placed inside an enclosed entrance lobby, on any vertical surface within 10 feet (254 mm) of the entrance door at a minimum height of 42 inches (1067 mm) above the walking surface.
4. Inside the building's fire command center.
5. On the exterior of the fire alarm control unit or on the wall immediately adjacent to the fire alarm control unit door where the alarm panel is located in the enclosed main lobby.

J101.1.2 Sign features. The building information sign shall consist of all of the following:

1. White reflective background with red letters.
2. Durable material.
3. Numerals shall be Roman or Latin numerals, as required, or alphabet letters.
4. Permanently affixed to the building or structure in an approved manner.

J101.1.3 Sign shape. The building information sign shall be a Maltese cross as shown in Figure J101.1.3.

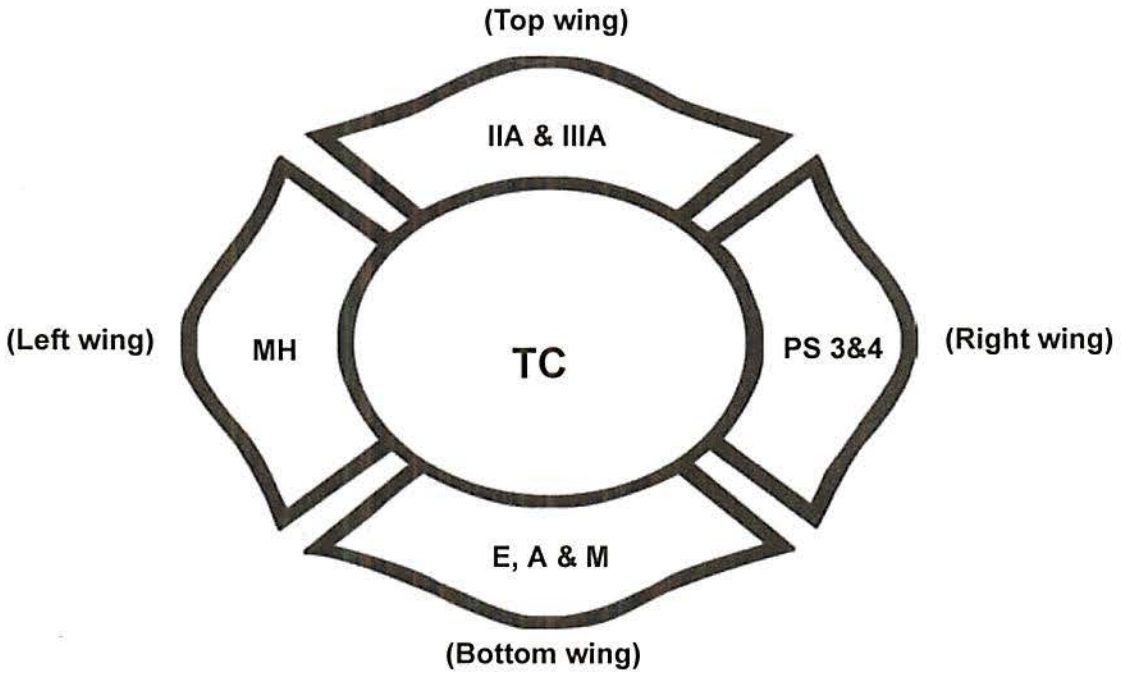


FIGURE J101.1.3
EXAMPLE OF COMPLETED BUILDING INFORMATION SIGN

J101.1.4 Sign size and lettering. The minimum size of the building information sign and lettering shall be in accordance with the following:

1. The width and height shall be 6 inches by 6 inches (152 mm by 152 mm).
2. The height or width of each Maltese cross wing area shall be $1^1/_8$ inches (29 mm) and have a stroke width of $^1/_2$ inch (13 mm).
3. The center of the Maltese cross, a circle or oval, shall be 3 inches (76 mm) in diameter and have a stroke width of $^1/_2$ inch (6 mm).
4. All Roman numerals and alphabetic designations, shall be $1^1/_4$ inch (32 mm) height and have a stroke width of $^1/_4$ inch (6 mm).

J101.2 Sign designations. Designations shall be made based upon the construction type, content, hazard, *fire protection systems*, life safety and occupancy. Where multiple designations occur within a classification category, the designation used shall be based on the greatest potential risk.

J101.3 Construction type (top wing). The construction types shall be designated by assigning the appropriate Roman numeral, and letter, placed inside the top wing of the Maltese cross. The hourly rating provided is for the structural framing in accordance with Table 601 of the *International Building Code*,

CONSTRUCTION TYPE	FIRE-RESISTANCE RATING
IA—Noncombustible	3 Hours
IB—Noncombustible	2 Hours
IIA—Noncombustible	1 Hour
IIB—Noncombustible	0 Hours
IIIA—Noncombustible/combustible	1 Hour
IIIB—Noncombustible/combustible	0 Hours
IV—Heavy timber (HT)	HT
VA—Combustible	1 Hour
VB—Combustible	0 Hours

J101.4 Fire protection systems (right wing). The *fire protection system* shall be designated by determining its level of protection and assigning the appropriate designation to the right wing of the Maltese cross. Where multiple systems are provided, all shall be listed:

- AS *Automatic sprinkler system* installed throughout
- DS Dry sprinkler system and designated areas
- FA Fire alarm system
- FP Fire pump
- FW *Fire wall* and designated areas
- PAS Pre-action sprinkler system and designated floor
- PS Partial *automatic sprinkler system*, and designate floor
- CES Chemical extinguishing system and designated area
- CS Combination sprinkler and standpipe system
- S Standpipe system
- NS No system installed

J101.5 Occupancy type (bottom wing). The occupancy of a building or structure shall be designated in accordance with the occupancy classification found in Section 302.1 of the *International Building Code* and the corresponding designation shall be placed in the bottom wing of the Maltese cross. Where a building or structure contains a mixture of uses and occupancies; all uses and occupancies shall be identified.

- A Assembly
- B Business
- E Educational
- F Factory or Industrial
- H High Hazard
- I Institutional
- M Mercantile
- R Residential

J101.6 Hazards of content (left wing). The hazards of building contents shall be designated by one of the following classifications as defined in NFPA 13 and the appropriate designation shall be placed inside the left wing of the Maltese cross:

- LH Light hazard
- MH Moderate hazard
- HH High hazard

J101.7 Tactical considerations (center circle). The center circle shall include the name of the local fire service and when required the letters TC for tactical considerations. Where fire fighters conduct preplan operations, a unique situation(s) for tactical considerations shall be identified and the information provided to the fire dispatch communications center to further assist fire fighters in identifying that there is special consideration(s) for this occupancy. Special consideration designations include, but are not limited to:

1. Impact-resistant drywall.
2. Impact-resistant glazing, such as blast or hurricane-type glass.
3. All types of roof and floor structural members including but not limited to post-tension concrete, bar joists, solid wood joists, rafters, trusses, cold-formed galvanized steel, I-joists and I-beams; green roof with vegetation, soil and plants.
4. Hazardous materials (explosives, chemicals, plastics, etc.).
5. Solar panels and DC electrical energy.
6. HVAC system; and smoke management system for pressurization and exhaust methods.
7. Other unique characteristic(s) within the building that are ranked according to a potential risk to occupants and fire fighters.

J101.8 Sign classification maintenance, building information. Sign maintenance shall comply with each of the following:

1. Fire departments in the jurisdiction shall define the designations to be placed within the sign.
2. Fire departments in the jurisdiction shall conduct annual inspections to verify compliance with this section of the code and shall notify the *owner*, or the *owner's* agent, of any required updates to the sign in accordance with fire department designations and the *owner*, or the *owner's* agent, shall comply within 30 days.
3. The owner of a building shall be responsible for the maintenance and updates to the sign in accordance with fire department designations.

J101.9 Training. Jurisdictions shall train fire department personnel on Sections J101.1 through J101.9.

SECTION J102
REFERENCED STANDARDS

ICC	IBC—15	International Building Code	J101.3, J101.5
NFPA	13—13	Installation of Sprinkler Systems	J101.6

APPENDIX K

CONSTRUCTION REQUIREMENTS FOR EXISTING AMBULATORY CARE FACILITIES

Deleted.

APPENDIX L

REQUIREMENTS FOR FIRE FIGHTER AIR REPLENISHMENT SYSTEMS

The provisions contained in this appendix are not mandatory unless specifically referenced in the adopting ordinance.

SECTION L101 GENERAL

L101.1 Scope. Fire fighter air replenishment systems (FARS) shall be provided in accordance with this appendix. The adopting ordinance shall specify building characteristics or special hazards that establish thresholds triggering a requirement for the installation of a FARS. The requirement shall be based upon the fire department's capability of replenishing fire fighter breathing air during sustained emergency operations. Considerations shall include:

1. Building characteristics, such as number of stories above or below grade plane, floor area, type of construction and fire-resistance of the primary structural *frame* to allow sustained fire-fighting operations based on a rating of not less than 2 hours.
2. Special hazards, other than buildings, that require unique accommodations to allow the fire department to replenish fire fighter breathing air.
3. Fire department staffing level.
4. Availability of a fire department breathing air replenishment vehicle.

SECTION L102 DEFINITIONS

L102.1 Definitions. For the purpose of this appendix, certain terms are defined as follows:

FIRE FIGHTER AIR REPLENISHMENT SYSTEM (FARS). A permanently installed arrangement of piping, valves, fittings and equipment to facilitate the replenishment of breathing air in self contained breathing apparatus (SCBA) for fire fighters engaged in emergency operations.

SECTION L103 PERMITS

L103.1 Permits. Permits shall be required to install and maintain a FARS. Permits shall be in accordance with Sections L103.2 and L103.3.

L103.2 Construction permit. A construction permit is required for installation of or modification to a FARS. The construction permit application shall include documentation of an acceptance and testing plan as specified in Section L105.

L103.3 Operational permit. An operational permit is required to maintain a FARS.

SECTION L104 DESIGN AND INSTALLATION

L104.1 Design and installation. A FARS shall be designed and installed in accordance with Sections L104.2 through L104.15.

L104.2 Standards. Fire fighter air replenishment systems shall be in accordance with Sections L104.2.1 and L104.2.2.

L104.2.1 Pressurized system components. Pressurized system components shall be designed and installed in accordance with ASME B31.3.

L104.2.2 Air quality. The system shall be designed to convey breathing air complying with NFPA 1989.

L104.3 Design and operating pressure. The minimum design pressure shall be 110 percent of the fire department's normal SCBA fill pressure. The system design pressure shall be marked in an approved manner at the supply connections, and adjacent to pressure gauges on any fixed air supply components. Pressure shall be maintained in the system within 5 percent of the design pressure.

L104.4 Cylinder refill rate. The FARS shall be capable of refilling breathing air cylinders of a size and pressure used by the fire department at a rate of not less than two empty cylinders in 2 minutes.

L104.5 Breathing air supply. Where a fire department mobile air unit is available, the FARS shall be supplied by an external mobile air connection in accordance with Section L104.14. Where a fire department mobile air unit is not available, a stored pressure air supply shall be provided in accordance with Section L104.5.1. A stored pressure air supply shall be permitted to be added to a system supplied by an external mobile air connection provided that a means to bypass the stored pressure air supply is located at the external mobile air connection.

L104.5.1. Stored pressure air supply. A stored pressure air supply shall be designed based on Chapter 24 of NFPA 1901 except that provisions applicable only to mobile apparatus or not applicable to system design shall not apply. A stored pressure air supply shall be capable of refilling not less than 50 empty breathing air cylinders of a size and pressure used by the fire department.

L104.5.2. Retrofit of external mobile air connection. A FARS not initially provided with an external mobile air connection due to the lack of a mobile air unit shall be retrofitted with an external mobile air connection where a mobile air unit becomes available. Where an external mobile air connection is provided, a means to bypass the

stored pressure air supply shall be located at the external mobile air connection. The retrofit shall be completed not more than 12 months after notification by the *fire code official*.

L104.6 Isolation valves. System isolation valves that are accessible to the fire department shall be installed on the system riser to allow piping beyond any air cylinder refill panel to be blocked.

L104.7 Pressure relief valve. Pressure relief valves shall be installed at each point of supply and at the top or end of every riser. The relief valve shall meet the requirements of CGA S-1.3 and shall not be field adjustable. Pressure relief valves shall discharge in a manner that does not endanger personnel who are in the area. Valves, plugs or caps shall not be installed in the discharge of a pressure relief valve. Where discharge piping is used the end shall not be threaded.

L104.8 Materials and equipment. Pressurized system components shall be *listed* or *approved* for their intended use and rated for the maximum allowable design pressure in the system. Piping and fittings shall be stainless steel.

L104.9 Welded connections. Piping connections that are concealed shall be welded.

L104.10 Protection of piping. System piping shall be protected from physical damage in an *approved* manner.

L104.11 Compatibility. Fittings and connections intended to be used by the fire department shall be compatible with the fire department's equipment.

L104.12 Security. Connections to a FARS shall be safeguarded from unauthorized access in an *approved* manner.

L104.13 Fill stations. Fire fighter air replenishment fill stations shall comply with Section L104.13.1 through L104.13.3.

L104.13.1 Location. Fill stations for refilling breathing air cylinders shall be located as follows:

1. Fill stations shall be provided at the fifth floor above and below the ground level floor and every third floor level thereafter.
2. On floor levels requiring fill stations, one fill station shall be provided adjacent to a required exit stair at a location designated by the *fire code official*. In buildings required to have three or more exit stairs, additional fill stations shall be provided at a ratio of one fill station for every three stairways.

L104.13.2 Design. Fill stations for breathing air cylinders shall be designed to meet the following requirements:

1. A pressure gauge and pressure-regulating devices and controls shall be provided to allow the operator to control the fill pressure and fill rate on each cylinder fill hose.
2. Valves controlling cylinder fill hoses shall be slow-operating valves.
3. A separate flow restriction device shall be provided on each fill hose.
4. A method shall be provided to bleed each cylinder fill hose.
5. The fill station shall be designed to provide a containment area that fully encloses any cylinder being filled and flexible cylinder fill hoses, and directs the energy from a failure away from personnel. Fill stations shall be designed to prohibit filling of cylinders that are not enclosed within the containment area.

   Exception: Where required or *approved* by the fire chief, fill stations providing for the direct refilling of the fire fighters' breathing air cylinders using Rapid Intervention Crew/Company Universal Air Connection (RIC/UAC) fittings shall be used in lieu of cylinder fill stations that utilize containment areas.

L104.13.3 Cylinder refill rate. Fill stations shall be capable of simultaneously filling two or more empty breathing air cylinders equivalent to those used by the fire department to the cylinders' design pressure within 2 minutes.

L104.14 External mobile air connection. An external mobile air connection shall be provided for fire department mobile air apparatus where required by Section L104.5 to supply the system with breathing air.

L104.14.1 Location. The location of the external mobile air connection shall be accessible to mobile air apparatus and *approved* by the fire chief.

L104.14.2 Protection from vehicles. A means of vehicle impact protection in accordance with Section 312 shall be provided to protect mobile air connections that are subject to vehicular impact.

L104.14.3 Clear space around connections. A working space of not less than 36 inches (914 mm) in width, 36 inches (914 mm) in depth and 78 inches (1981 mm) in height shall be provided and maintained in front of and to the sides of external mobile air connections.

L104.15 Air monitoring system. An *approved* air monitoring system shall be provided. The system shall automatically monitor air quality, moisture and pressure on a continual basis. The air monitoring system shall be equipped with not less than two content analyzers capable of detecting carbon monoxide, carbon dioxide, nitrogen, oxygen, moisture and hydrocarbons.

L104.15.1 Alarm conditions. The air monitoring system shall transmit a supervisory signal when any of the following levels are detected:

1. Carbon monoxide exceeds 5 ppm.
2. Carbon dioxide exceeds 1,000 ppm.
3. An oxygen level below 19.5 percent or above 23.5 percent.
4. A nitrogen level below 75 percent or above 81 percent.
5. Hydrocarbon (condensed) content exceeds 5 milligrams per cubic meter of air.

6. The moisture concentration exceeds 24 ppm by volume.
7. The pressure falls below 90 percent of the maintenance pressure specified in Section L104.3.

L104.15.2 Alarm supervision, monitoring and notification. The air monitoring system shall be electrically supervised and monitored by an *approved* supervising station, or where *approved*, shall initiate audible and visual supervisory signals at a constantly attended location.

L104.15.3 Air quality status display. Air quality status shall be visually displayed at the external mobile air connection required by Section L104.14.

SECTION L105
ACCEPTANCE TESTS

L105.1 Acceptance tests. Upon completion of the installation, a FARS shall be acceptance tested to verify compliance with equipment manufacturers' instructions and design documents. Oversight of the acceptance tests shall be provided by a registered design professional. Acceptance testing shall include all of the following:

1. A pneumatic test in accordance with ASME B31.3 of the complete system at a minimum test pressure of 110 percent of the system design pressure using oil free dry air, nitrogen or argon shall be conducted. Test pressure shall be maintained for not less than 24 hours. During this test, all fittings, joints and system components shall be inspected for leaks. Defects in the system or leaks detected shall be documented and repaired.
2. A cylinder-filling performance test shall be conducted to verify compliance with the required breathing air cylinder refill rate from the exterior mobile air connection and, where provided, a stored air pressure supply system.
3. The air quality monitoring system shall be tested to verify both of the following conditions:
   - 3.1. Visual indicators required by Section L104.15.1 function properly.
   - 3.2. Supervisory signals are transmitted as required by Section L104.15.2 for each sensor based on a sensor function test.
4. Connections intended for fire department use shall be confirmed as compatible with the fire department's mobile air unit, SCBA cylinders and, where provided, RIC/UAC connections.
5. Air samples shall be taken from not less than two fill stations and submitted to an *approved* gas analysis laboratory to verify compliance with NFPA 1989. The FARS shall not be placed into service until a written report verifying compliance with NFPA 1989 has been provided to the *fire code official*.

SECTION L106
INSPECTION, TESTING AND MAINTENANCE

L106.1 Periodic inspection, testing and maintenance. A FARS shall be continuously maintained in an operative condition and shall be inspected not less than annually. Not less than quarterly, an air sample shall be taken from the system and tested to verify compliance with NFPA 1989. The laboratory test results shall be maintained on site and readily available for review by the *fire code official*.

SECTION L107
REFERENCED STANDARDS

ASME B31.3—2012	Process Piping	L104.2.1, L105.1
CGA S-1.3—2008	Pressure Relief Device Standards – Part 3 Stationary Storage Containers for Compressed Gases	L104.7
NFPA 1901—09	Standard for Automotive Fire Apparatus	L104.5.1,
NFPA 1989—13	Breathing Air Quality for Fire Emergency Services Respiratory Protection	L104.2.2, L105.1, L106.1

APPENDIX M

HIGH-RISE BUILDINGS—RETROACTIVE AUTOMATIC SPRINKLER REQUIREMENT

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AGENDA ITEM 6:

EMERGENCY OPERATIONS PLAN REVIEW

MANAGER'S COMMENTS:

Mr. Doug Logan, On Target Preparedness, will present the updated County's Emergency Operations Plan (EOP).

Board action is requested to adopt the revised Emergency Operations Plan as presented.

Watauga County Emergency Services

184 Hodges Gap Rd, Suite D
Boone, NC 28607
Phone 828-264-4235
Fax 828-265-7617

Fire Marshal ♦ Emergency Management ♦ Communications

April 23, 2024

To: Board of Commissioners

CC: Deron Geouque, County Manager
Anita Fogle, Clerk to the Board

Subject: Emergency Operations Plan Review

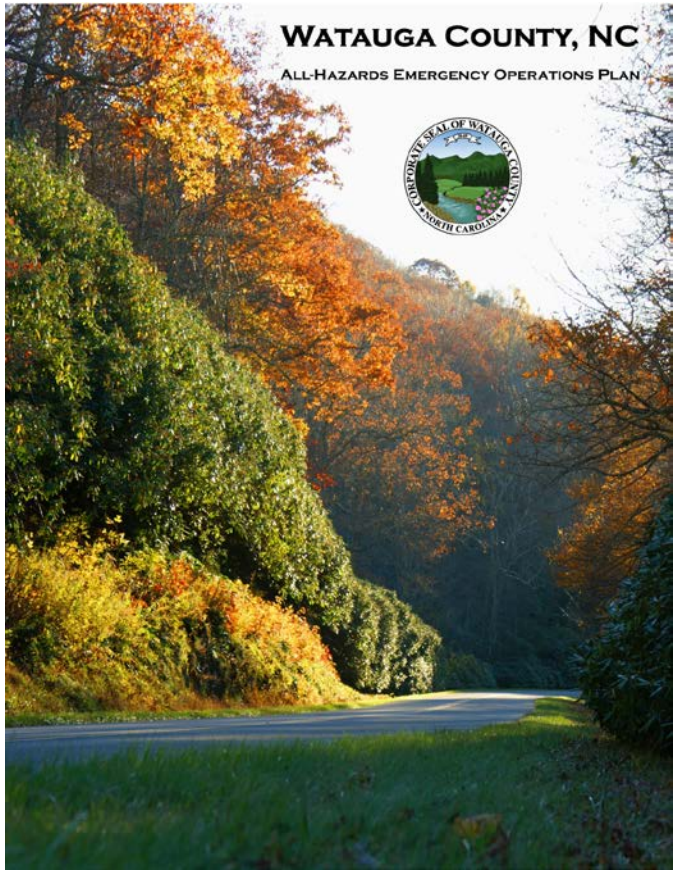
Board of Commissioners,

Mr. Doug Logan with On Target Preparedness will present the updated Watauga County Emergency Operations Plan for Watauga County. The last comprehensive review of this plan was done prior to 2018. After Mr. Logan's presentation, Commissioner action is requested to adopt the revised plan.

Respectfully,

Will Holt
ES Director

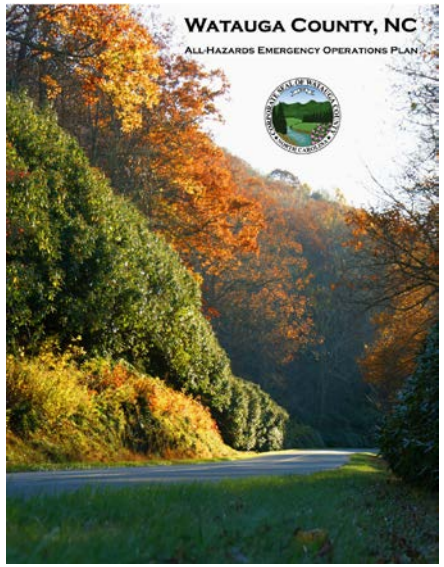
Watauga County, NC
Emergency Operations Plan (EOP) Project



ON TARGET PREPAREDNESS

Watauga County, NC
Emergency Operations Plan (EOP) Project

This project made possible by:



"Chance Favors.....

...the Prepared Mind!"

Louis Pasteur

Are You Prepared?

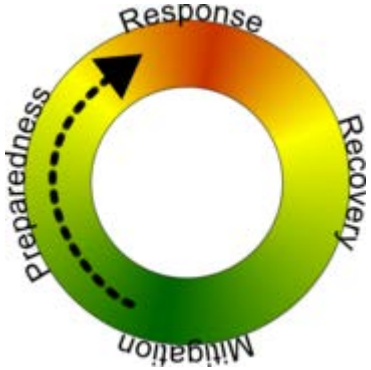
ON TARGET PREPAREDNESS

What is Emergency Management?

Emergency Management

The effective management of emergencies and disasters through:

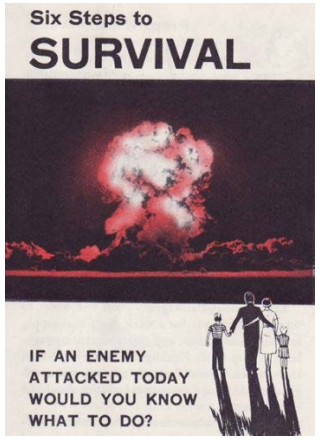
- Preparedness
- Response
- Recovery
- Mitigation

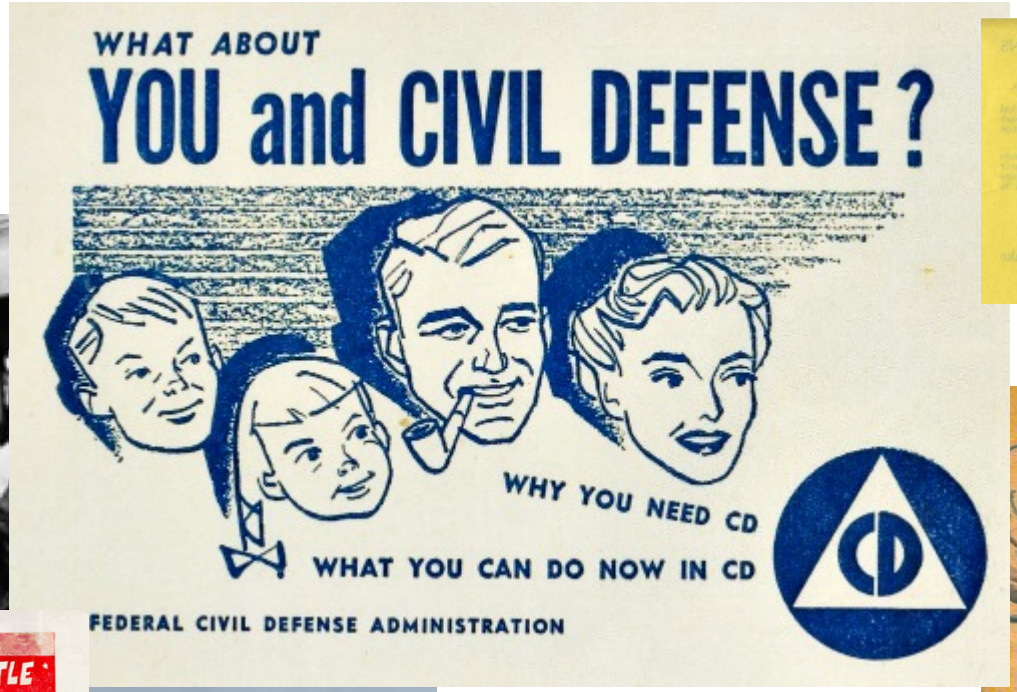


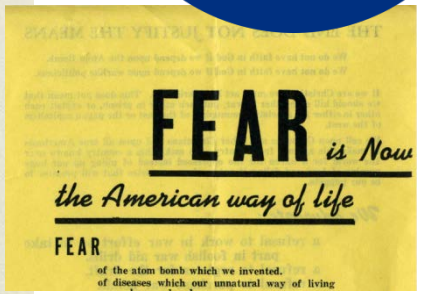
ON TARGET PREPAREDNESS

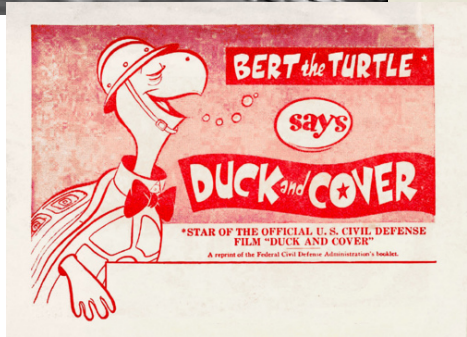
Civil Defense Act of 1950

A system of local preparedness and education





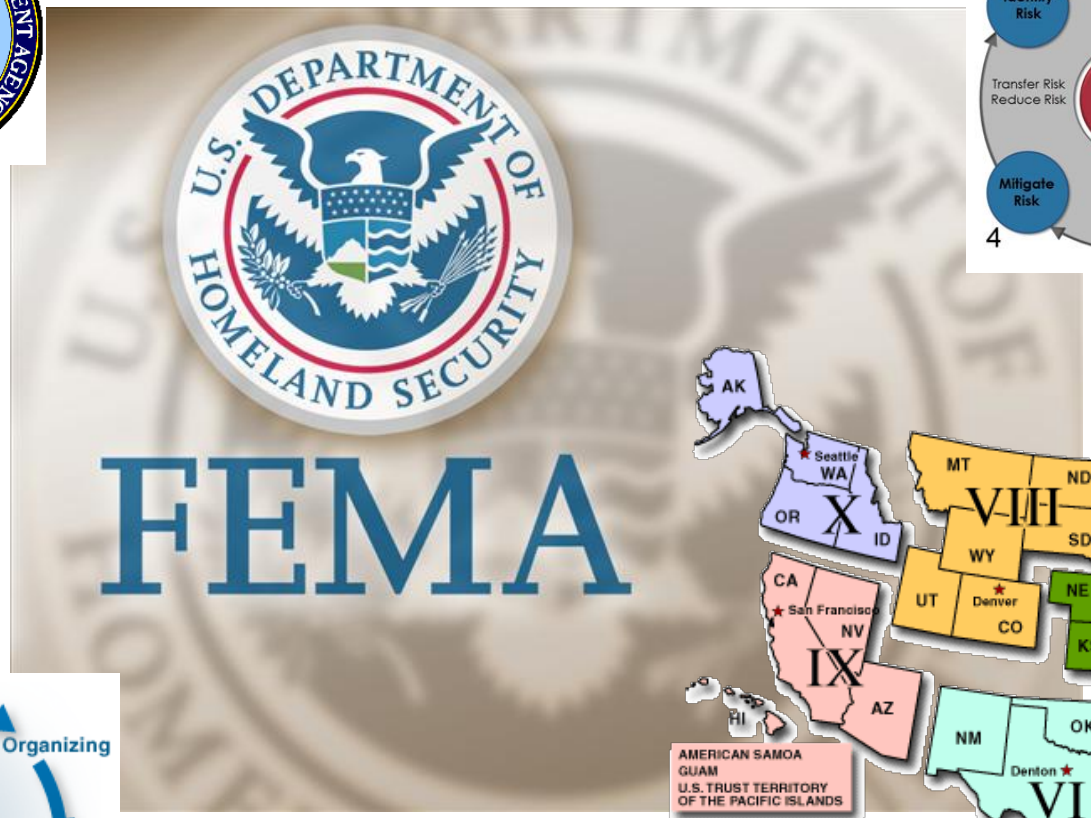


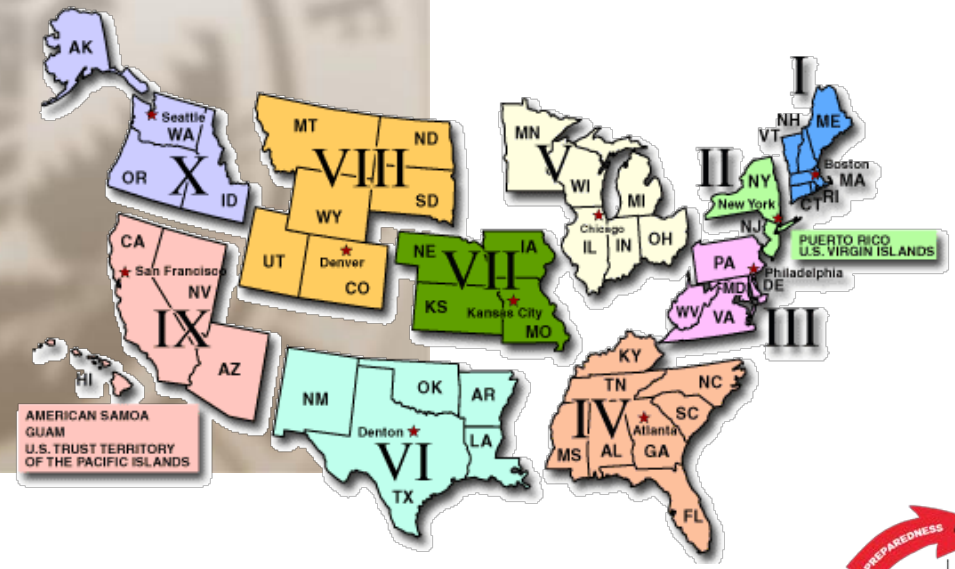


ON TARGET PREPAREDNESS

Federal Emergency Management Agency

FEMA





ON TARGET PREPAREDNESS

Federal Emergency Management Agency

FEMA

- Created in 1979 under the Carter Administration by Executive Order
- All-Hazards Approach to Management of Emergencies and Disasters

Natural Hazards

Manmade Hazards

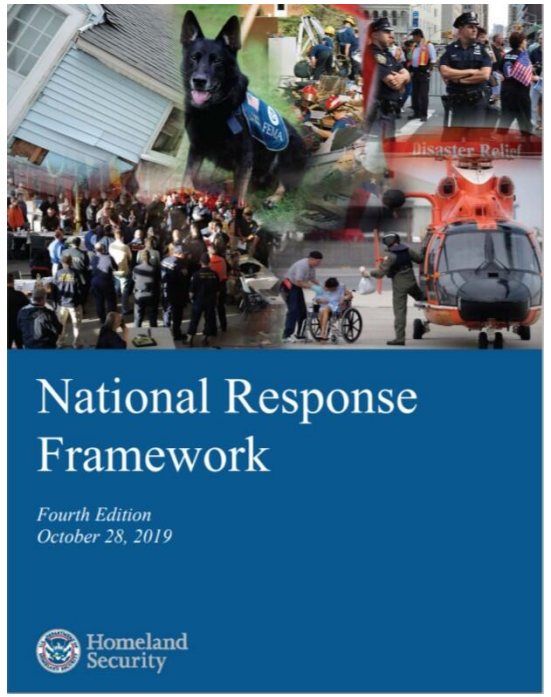
ON TARGET PREPAREDNESS

National Response Framework

A guide for National Response to all types of Emergencies and Disasters.

Structured to help jurisdictions, citizens, NGOs, and businesses:

- Develop community plans
- Integrate continuity plans
- Build capabilities to respond
- Stabilize and restore services



Developing and Maintaining Emergency Operations Plans

Comprehensive Preparedness Guide (CPG) 101

September 2021, Version 3.0

FEMA

ON TARGET PREPAREDNESS

Plan Overview

Plan vs. SOG

Plan:

- High Level – City or County Level
- Assigns Responsibilities
- Concept of Operations/Framework
- Establishes the “WHO” of an operation

Standard Operating Guideline (SOG):

- Specific to Agency or Personnel
- Provides Operational Parameters
- Gives specific directions
- Establishes the “HOW” of an operation

Plan Overview

Table of Contents

ON TARGET PREPAREDNESS

Plan Overview

Five (5) Major Sections

1. Basic Plan
2. Functional Annexes
3. Hazard-Specific Annexes
4. Appendices
5. Glossary

BASIC PLAN

FUNCTIONAL ANNEXES

HAZARD-SPECIFIC ANNEXES

APPENDICES

GLOSSARY OF TERMS AND ACRONYMS

ON TARGET PREPAREDNESS

Plan Overview

Basic Plan

Snapshot of the County

Lays Out:

- Purpose and Scope of the Plan
- General Description and Organization of the County
- Planning Assumptions
- General Concept of Operations for any Incident
- Assignment of Responsibilities
- Plan Administration
- Legal Authorities and References

Plan Overview

Functional Annexes

Functions and Operations Common to All Incidents

Lays Out:

- Functional areas that are common to all incidents
- General concepts of operations for each function
- Continuity of Operations and Government

Direction, Control and Coordination

Mass Care

Evacuation

Public Information

Damage Assessment

Warning and Communications

Debris Management

Plan Overview

Hazard-Specific Annexes

Functions and Operations for Specific Types of Hazards

Lays Out:

- Functional areas that are specific to certain hazard types
- General and Specific concepts of operations for each hazard
- Uses elements of FUNCTIONAL Annexes
- Outlines some specific procedures and guidelines

Flooding/Dam Failure
Earthquake
Hazardous Materials
Infectious Disease
Terrorism

ON TARGET PREPAREDNESS

Plan Overview

Appendices

Specific Reference Material

Provides:

- Reference material and templates for incident management
- Specific procedures common to all incidents

B. Proclamation and Termination of a State of Emergency

Situation

North Carolina General Statute (NCGS) §166A provides authority for a municipality to declare, within its corporate boundaries, the existence of a "State of Emergency" by public proclamation. This provision allows the municipality to implement and enforce measures outlined within its Emergency Ordinances and other guidance from Federal, State, and local authorities, such as are necessary to protect life and property within its jurisdiction.

A State of Emergency declaration may also assist with Recovery efforts within the municipality to ensure protective measures are put in place following the hazard or on-going threat that required the initial declaration. In addition, reimbursement for expenditures made by and on behalf of the County in response to the hazard or on-going threat may require a prior declaration of the

A. Emergency Operations Center

General

Purpose

The purpose of this SOG is to establish standard procedures for the activation and operation of the Watauga County Emergency Operations Center (EOC).

Also see Direction and Control for continuity of government and lines of succession in overall operations, including the Emergency Operations Center.

Scope

This SOG includes organizational and functional procedures necessary to activate and operate the EOC quickly and efficiently. This SOG will apply except when modified as needed to meet specific conditions and situations. The Emergency Management Coordinator or their designee will carry out modifications.

Facility

The EOC is located at 184 Hodges Gap Road Boone, NC 28607.

Function

The Emergency Operations Center provides necessary space and facilities for the centralized direction and control of the following functions:

- Direction of emergency operations.
- Communications and warning

ON TARGET PREPAREDNESS

Plan Overview

Glossary of Terms

Definitions of Terms and Acronyms

Provides:

- Relative definitions for terms as used in the plan
- Expansion of commonly used acronyms

Glossary of Terms and Acronyms:

AMBER Alert- America's Missing: Broadcast Emergency Response. An eme disseminates information about a missing person (usually a child), by mec roadway signs.

CPG – Comprehensive Preparedness Guide. Documents developed ar Emergency Management Agency (FEMA) to provide guidance in creation ar and disaster plans, as well as a whole approach to community preparednes

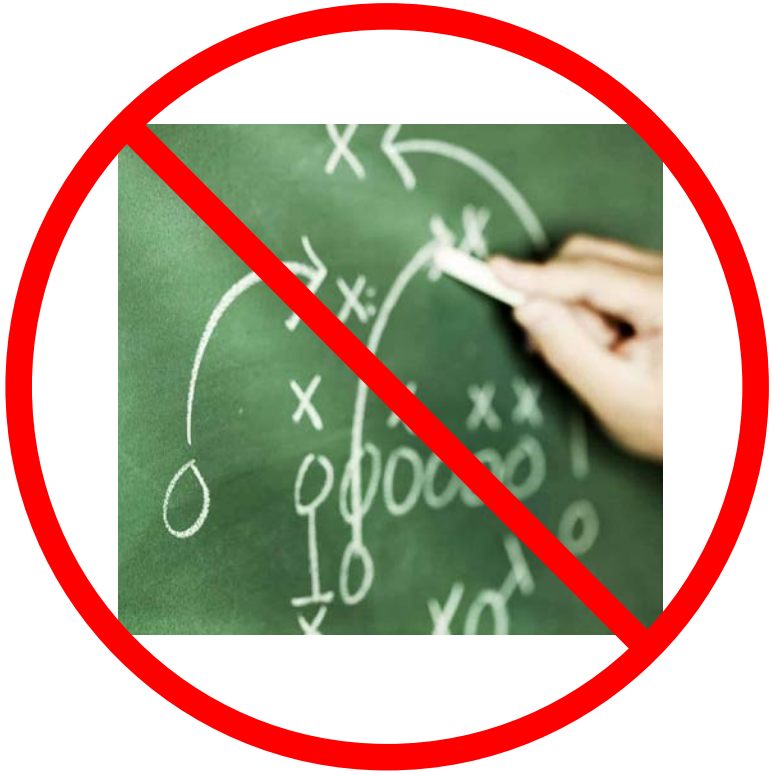
DRC - Disaster Recovery Center. An accessible facility or mobile office provide disaster recovery application assistance and to provide informatio assistance programs.

EOC – Emergency Operations Center. A central command and control facili the principles of emergency preparedness and Emergency Manageme functions at a strategic level during an emergency, and ensuring the continu political subdivision or other organization. An EOC is responsible for strate decisions and does not normally directly control field assets, instead leavi commands. The common functions of EOCs are to collect, gather and anal protect life and property, maintain continuity of the organization, within the provide logistical support to field units.

ON TARGET PREPAREDNESS

EOP Usage

Not an Incident-Specific Playbook!



EOP Usage

General Concept of Operations Identifies:

- Preparedness Phase
  - Directs the Development of SOGs
  - Directs Creation of Mutual Aid as Needed
  - Directs Pre-Planning/Identification of Response Needs

D. Concept of Operations

As required by General Statute 166A-19 it is the responsibility of Watauga County Government to organize and plan for the protection of life and property from the effects of an emergency/disaster. The Emergency Services Director serves as the primary Emergency Management Coordinator for Watauga County in accordance with NCGS.

E. Phases of Emergency Management

Watauga County utilizes the four phases of Comprehensive Emergency Management in designing and implementing the emergency services program. These phases are:

- Preparedness - Through disaster planning and recognition of hazards likely to affect the area, the county and municipal agencies are able to prepare for potential disasters. County and municipal agencies are offered training and equipment in preparation for a disaster and each department is responsible for seeing that their responders have adequate training to carry out assigned functions. Many other programs are offered to the residents of Watauga County

EOP Usage

General Concept of Operations Identifies:

- Response Phase
  - ➢ Pre-Impact Activities
    - Preplanning
    - Response Resource Readiness
    - Public Information
  - ➢ Impact
    - Implement Protective Actions
    - Coordinate Resource Allocation
    - Begin Planning for Recovery
- Recovery
- Mitigation

- Response –When a disaster occurs, the county and municipal agencies respond either as direct assistance to the disaster area or as support to the first responders on-scene. The response agencies should act within their scope of training and can call upon outside resources as needed to mitigate further damage.
- Recovery - After the immediate short-term emergency needs of an area are controlled, the county and municipal governments begin a recovery process that may take several days to many months or years. Response agencies will determine what impacts have been made on the community and what activities need to take place to restore the community to pre-disaster conditions. Many times, this effort will overwhelm the jurisdiction and assistance from the State and Federal Government will be needed.
- Mitigation – Through the planning, building, and fire inspection programs the county and municipal governments use codes and standards to prevent industry from impacting on residential areas and also prevent sub-standard building construction and/or construction in flood prone areas. Mitigation programs offered through the Federal Emergency Management Agency are used to help reduce identified vulnerabilities. Education of the public about potential disaster effects and how to avoid associated problems is a program used, that also helps to prevent injury and death from disasters.

ON TARGET PREPAREDNESS

EOP Usage

Functional Annexes

- Direction, Control, and Coordination

VII. Functional Annexes

A. Direction, Control, and Coordination

Concept of Operations

General

- Emergency operations shall include all activities which are directed toward reduction of the immediate hazard, establishing situation control and restoration of normal operations within the County.
- The responsibility for the direction and control of disaster situations is vested in the County Board of Commissioners and is routinely exercised through the Emergency Management Coordinator or the County Manager.
- The Emergency Management Coordinator will activate, organize, and operate the Emergency Operations Center in a flexible manner based on the magnitude of the situation.
- The organizational structure of the Emergency Operations Center will be arranged according to the type of incident, agencies and/or jurisdictions involved, objectives and strategies selected to resolve the situation and the demands of the emergency. Municipalities, when needed, will provide representation in the County Emergency Operations Center for inter-jurisdictional coordination when the event severely affects the jurisdiction, or as requested.
- The Chairman of the Board of Commissioners and County Manager will be notified by the Emergency Management Coordinator when Emergency Operations Center activation is warranted to direct and control emergency operations.

EOP Usage Scenario

Major Ice Storm

- Freezing Rain Event Will Likely Cause:
  - Injuries/Mass Casualties
  - Widespread Power Outages
  - Transportation Disruption
  - Public Sheltering
  - Infrastructure Damages
  - Loss of Business/Economic Impact

EOP Usage Scenario

Major Ice Storm

- Freezing Rain Event Will Likely Cause:
  - Injuries/Mass Casualties
  - Widespread Power Outages
  - Transportation Disruption
  - Public Sheltering
  - Infrastructure Damages
  - Loss of Business/Economic Impact

H. Health and Medical

Emergency Medical Services (EMS)

Purpose

This section provides emergency medical services during natural and technological emergencies.

Concept Of Operations

General

- Watauga County is served by UNC Health-Appalachian Watauga Medical Center in Boone.
- Watauga County contracts with Watauga Medics, Inc. to provide emergency medical response county wide and operates at the Paramedic level provides emergency and non-emergency services to the citizens of Watauga County. EMS and First Responders responding to an emergency can be on-site within approximately 10 minutes.
- One volunteer rescue squad provides rescue and back-up EMS services to the citizens of Watauga County.

ON TARGET PREPAREDNESS

EOP Usage Scenario

Major Ice Storm

- Freezing Rain Event Will Likely Cause:
  - Injuries/Mass Casualties
  - Widespread Power Outages
  - Transportation Disruption
  - Public Sheltering
  - Infrastructure Damages
  - Loss of Business/Economic Impact

F. Mass Care (Emergency Assistance, Housing, Human Services)

Shelter and Mass Care

Purpose

This annex provides for the protection of the population from the effects of hazards through the identification of shelters and provisions of mass care and social services in shelters.

Situation and Assumptions

Situation

- Based upon the County's hazard analysis, there are several emergencies for which shelters may be required including severe storms, tornadoes, floods, hazardous material accidents, and fires.
- The Watauga County Emergency Services Office and the American Red Cross have identified and surveyed potential shelters in the county and have determined which would be appropriate to use during disasters.

Assumptions

- Sufficient in-county sheltering exists to meet the needs of an evacuation during emergencies or disaster.
- For out-of-county evacuation, sufficient shelter capacity exists in adjacent counties and shelter locations can be arranged and made available.
- A high percentage of evacuees will seek shelter with friends or relatives rather than go to public shelter.

ON TARGET PREPAREDNESS

Questions??

ON TARGET PREPAREDNESS

Doug Logan, Project Lead
dlogan@ontargetprep.com

Emergency Management Planner II
On Target Preparedness, LLC

ON TARGET PREPAREDNESS

AGENDA ITEM 7:

PAY AND CLASSIFICATION STUDY REVIEW

MANAGER'S COMMENTS:

Mr. David Hill, Piedmont Triad Regional Council, will present the Pay and Classification Plan Study authorized by the Board. Mr. Hill will review the results of the study and provide a recommendation for salaries and position grades along with modifications to employee benefits. The recommendation will assist the County in being competitive in recruitment and retention of employees. Staff has incorporated Mr. Hill's recommendation into the Manager's proposed budget.

Board action is required to approve Mr. Hill's recommendation as presented.

WATAUGA COUNTY
PAY AND CLASSIFICATION STUDY REVIEW

MAY 7, 2024

WATAUGA COUNTY
PAY AND CLASSIFICATION STUDY REVIEW

EXPECTED STUDY OUTCOMES

TO DETERMINE AND MAKE RECOMMENDATIONS REGARDING THE GEOGRAPHIC MARKET POSITION FOR WATAUGA COUNTY TO SUPPORT THE COUNTY'S EMPLOYEE RECRUITMENT AND RETENTION INITIATIVES.

STUDY PROCESS OVERVIEW

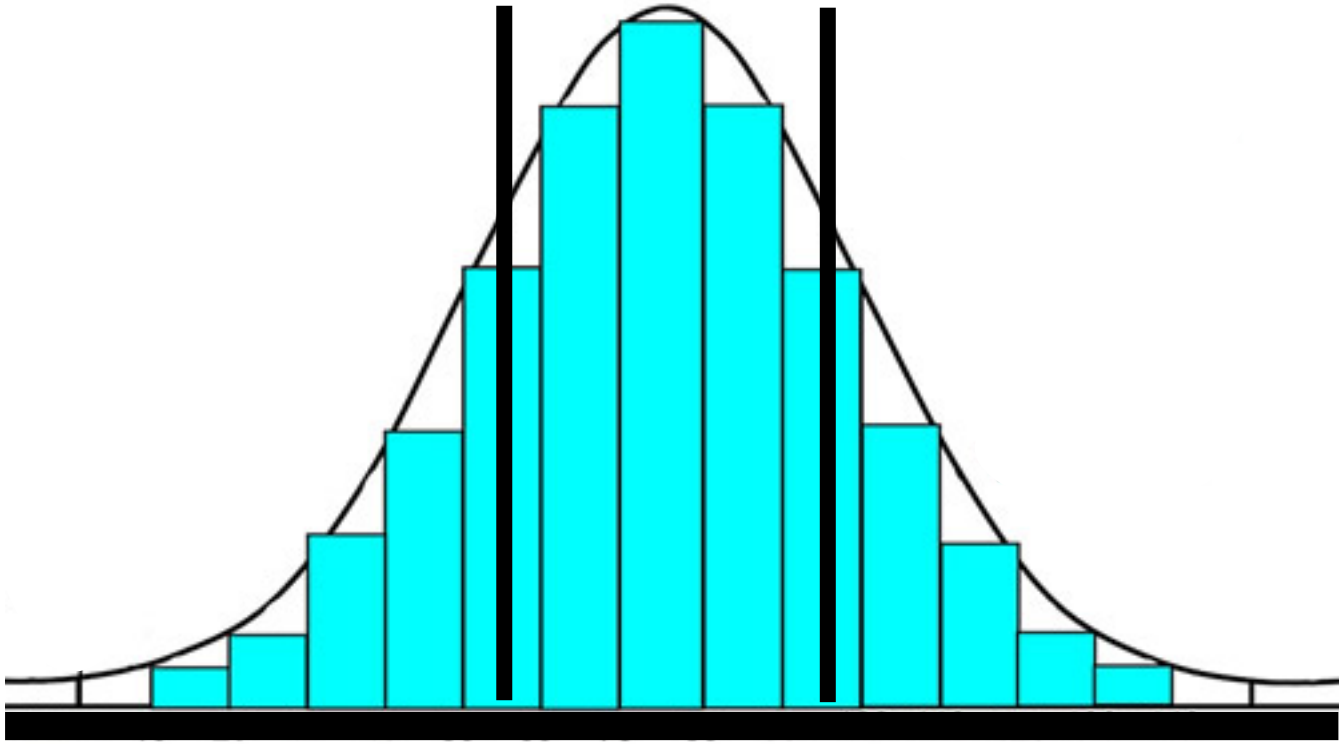
- Identified Local Comparison Market.
- Conducted Employee “Kick-Off” Meetings.
- Met Individually with Department Directors.
- Received Organizational Charts and Job Descriptions.
- Employees Completed 12-Page Position Description Questionnaire.
- Market Workforce Data Received, Analyzed and Comparisons Initiated.
- Preliminary Findings and Recommendations Developed and Reviewed.
- Finalization of Findings and Recommendations Presented this Evening.
- Reviewed and Updated Job Descriptions.

WORKFORCE ANALYSIS AT BEGINNING OF STUDY

Standard Deviation “Bell” Curve

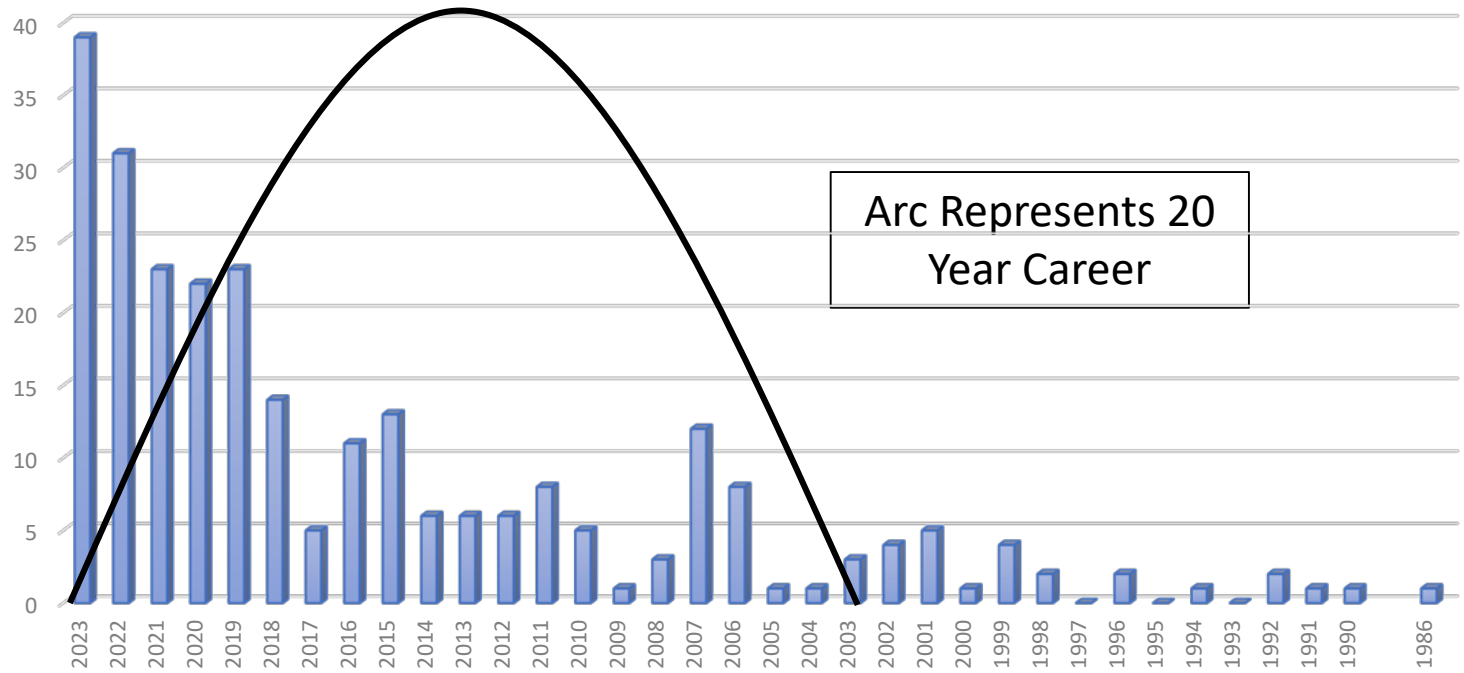
In a mature workforce, practically every element regarding employees’ pay and performance would expect to be within standard deviations and resemble the “Bell Curve”

Two-thirds of workforce, typically, should be located within the middle third of the measured metric.



DISTRIBUTION OF EMPLOYEES BY YEAR EMPLOYED

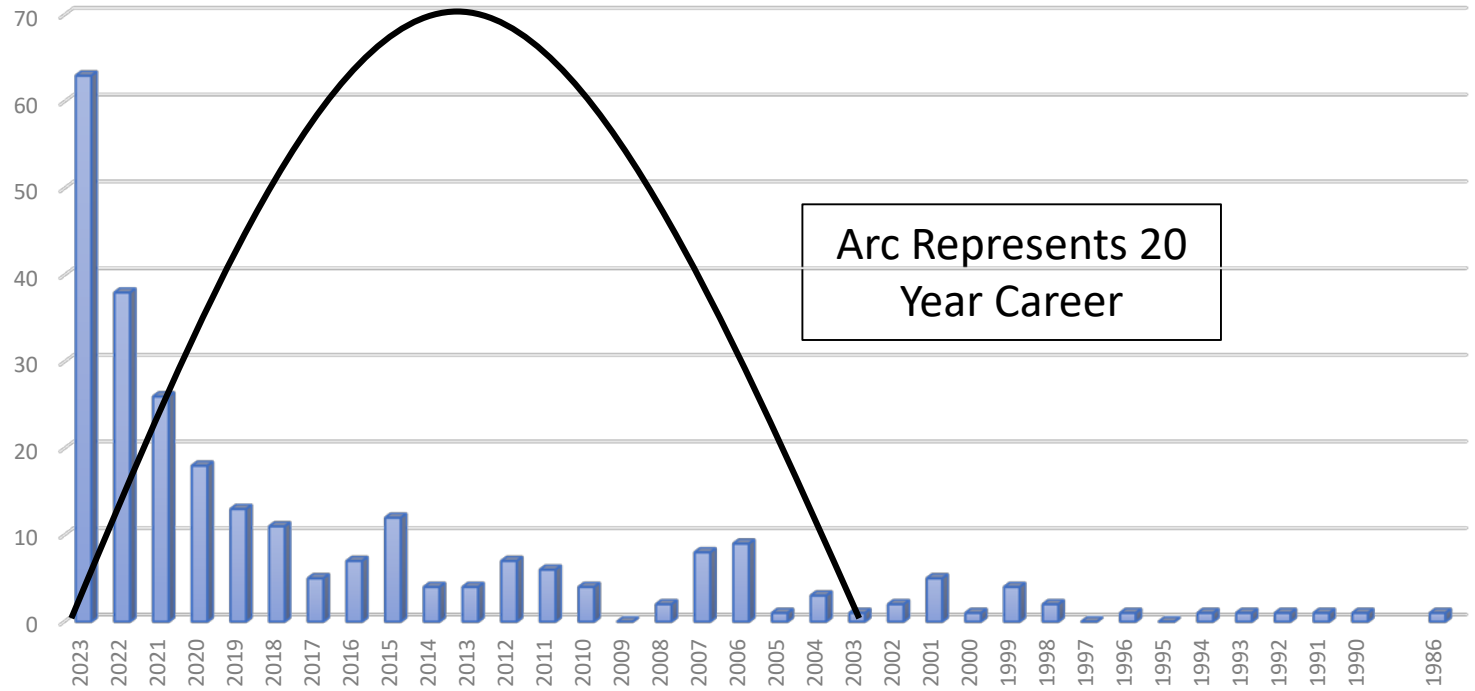
PROVIDES VISUALIZATION OF WHAT RECRUITMENT AND RETENTION LOOKS LIKE



Each bar represents the number of employees, currently working, who were employed in each year shown.

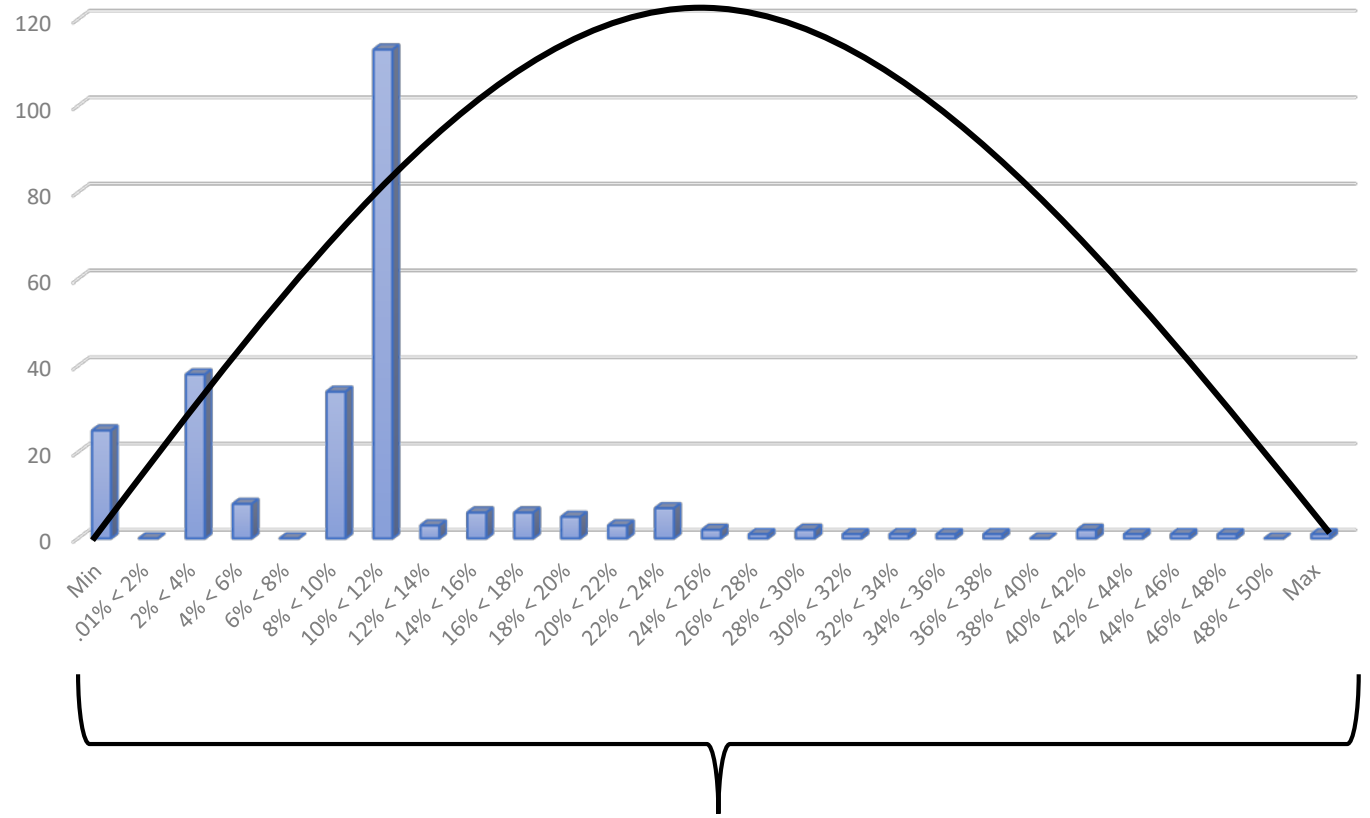
< 2 Yrs	74	28.03%
< 5 Yrs	139	52.65%
< 10 Yrs	188	70.94%
AVG	7.73 Yrs	

DISTRIBUTION OF EMPLOYEES BY YEAR EMPLOYED IN CURRENT POSITION



< 2 Yrs	103	39.16%
< 5 Yrs	159	60.46%
< 10 Yrs	198	75.29%
AVG	6.7 Yrs	

DISTRIBUTION OF EMPLOYEE SALARIES SHOWN AS PERCENT ABOVE GRADE MINIMUM



Pay Grade Range: 50%

< 2%	25	9.50%
< 5%	63	23.95%
< 10%	105	39.92%
< 11%	215	81.75%
	AVG	10.64%

MARKET COMPARISONS

MARKET COMPARISONS

Alexander Co.	Ashe County	Burke County
Caldwell Co.	Catawba Co.	Wilkes County
Blowing Rock	Boone	Hickory
Lenoir	Morganton	ASU
	Watauga Schools	*

* Election Directors, in accordance with General Statute, G.S. 163-35(c) and case law guidance, have salary recommendations that shall be commensurate with the salary paid to directors in counties similarly situated and similar in population and number of registered voters (primary considerations). Those identified counties are: Granville, Stanly, Lenoir, Haywood, Pender, Sampson, Lee, Wilkes, Surry, Rutherford and Columbus.

MARKET COMPARISON EXAMPLE

Elections Director	3%	Grd	Min	Midpt	Max	Salary	CR	% > Min	Range	Range
Columbus			49,742	59,216	71,060	52,184	0.88	4.9%	42.9%	Elections Dir
Granville			60,506	76,352	92,199	84,743	1.11	40.1%	52.4%	Elections Dir
Haywood			58,535	76,768	95,000	85,608	1.12	46.3%	62.3%	Elections Dir
Lee			68,351	87,148	105,944	76,560	0.88	12.0%	55.0%	Elections Dir
Lenoir			54,230	68,373	82,517	71,153	1.04	31.2%	52.2%	Elections Dir
Pender			65,387	81,734	98,081	65,387	0.80	0.0%	50.0%	Elections Dir
Rutherford			60,904	68,556	76,207	60,020	0.88	-1.5%	25.1%	Elections Dir
Sampson			64,872	82,716	100,548	66,816	0.81	3.0%	55.0%	Elections Dir
Stanly			60,850	79,105	97,360	81,473	1.03	33.9%	60.0%	Elections Dir
Surry			56,839	76,778	96,718	78,410	1.02	38.0%	70.2%	Elections Dir
Wilkes			47,352	58,622	69,891	60,169	1.03	27.1%	47.6%	Elections Dir
Elections Dir		**12**	**57,109**	**71,387**	**85,664**	**66,224**	**0.93**	**16.0%**	**50.0%**	
Average	61,576	-4.47%	59,783	75,615	91,447	73,034	0.97	53.0%	53.0%	-9.32%
Median (50th pctile)	62,498	-5.88%	60,678	76,773	95,859	73,857	0.96	58.0%	58.0%	-10.33%
Recommendation		**14**	**62,963**	**78,704**	**94,444**				**50.0%**	

CURRENT PAY PLAN STRUCTURE

Grd	Min	Midpt	Max	Range	Min Diff	Midpt Diff	Max Diff
1	33,391	41,738	50,086	50.00%			
2	35,060	43,825	52,590	50.00%	5.00%	5.00%	5.00%
3	36,813	46,017	55,220	50.00%	5.00%	5.00%	5.00%
4	38,654	48,317	57,981	50.00%	5.00%	5.00%	5.00%
5	40,586	50,733	60,879	50.00%	5.00%	5.00%	5.00%
6	42,615	53,269	63,923	50.00%	5.00%	5.00%	5.00%
7	44,746	55,933	67,119	50.00%	5.00%	5.00%	5.00%
8	46,983	58,729	70,475	50.00%	5.00%	5.00%	5.00%
9	49,333	61,666	73,999	50.00%	5.00%	5.00%	5.00%
10	51,800	64,750	77,700	50.00%	5.00%	5.00%	5.00%
11	54,389	67,986	81,584	50.00%	5.00%	5.00%	5.00%
12	57,109	71,387	85,664	50.00%	5.00%	5.00%	5.00%
13	59,965	74,956	89,947	50.00%	5.00%	5.00%	5.00%
14	62,963	78,704	94,444	50.00%	5.00%	5.00%	5.00%
15	66,111	82,638	99,166	50.00%	5.00%	5.00%	5.00%
16	69,417	86,771	104,125	50.00%	5.00%	5.00%	5.00%
17	72,887	91,109	109,330	50.00%	5.00%	5.00%	5.00%
18	76,532	95,665	114,798	50.00%	5.00%	5.00%	5.00%
19	80,359	100,448	120,538	50.00%	5.00%	5.00%	5.00%
20	84,377	105,471	126,565	50.00%	5.00%	5.00%	5.00%
21	88,595	110,744	132,893	50.00%	5.00%	5.00%	5.00%
22	93,024	116,281	139,537	50.00%	5.00%	5.00%	5.00%
23	97,676	122,095	146,514	50.00%	5.00%	5.00%	5.00%
24	102,560	128,200	153,840	50.00%	5.00%	5.00%	5.00%
25	107,688	134,609	161,531	50.00%	5.00%	5.00%	5.00%

PROPOSED PAY PLAN

Grade	Min	Midpt	Max	Range	Diff Min	Diff Midpt	Diff Max
1	38,400	48,000	57,600	50.00%			
2	40,320	50,400	60,480	50.00%	5.00%	5.00%	5.00%
3	42,336	52,920	63,504	50.00%	5.00%	5.00%	5.00%
4	44,453	55,566	66,679	50.00%	5.00%	5.00%	5.00%
5	46,676	58,345	70,014	50.00%	5.00%	5.00%	5.00%
6	49,010	61,262	73,515	50.00%	5.00%	5.00%	5.00%
7	51,461	64,326	77,191	50.00%	5.00%	5.00%	5.00%
8	54,034	67,543	81,051	50.00%	5.00%	5.00%	5.00%
9	56,736	70,920	85,104	50.00%	5.00%	5.00%	5.00%
10	59,573	74,466	89,360	50.00%	5.00%	5.00%	5.00%
11	62,552	78,190	93,828	50.00%	5.00%	5.00%	5.00%
12	65,680	82,100	98,519	50.00%	5.00%	5.00%	5.00%
13	68,964	86,205	103,446	50.00%	5.00%	5.00%	5.00%
14	72,412	90,515	108,618	50.00%	5.00%	5.00%	5.00%
15	76,033	95,041	114,049	50.00%	5.00%	5.00%	5.00%
16	79,835	99,793	119,752	50.00%	5.00%	5.00%	5.00%
17	83,827	104,783	125,740	50.00%	5.00%	5.00%	5.00%
18	88,018	110,023	132,028	50.00%	5.00%	5.00%	5.00%
19	92,419	115,524	138,628	50.00%	5.00%	5.00%	5.00%
20	97,040	121,300	145,560	50.00%	5.00%	5.00%	5.00%
21	101,892	127,365	152,838	50.00%	5.00%	5.00%	5.00%
22	106,987	133,733	160,480	50.00%	5.00%	5.00%	5.00%
23	112,336	140,420	168,505	50.00%	5.00%	5.00%	5.00%
24	117,953	147,441	176,929	50.00%	5.00%	5.00%	5.00%
25	123,851	154,813	185,776	50.00%	5.00%	5.00%	5.00%

BENEFITS REVIEW RECOMMENDATIONS

BENEFITS CONTINUATION FOR RETIRED EMPLOYEES

ARTICLE X, SECTION 1, INSURANCE BENEFITS (PROPOSED)

The County will pay full premium costs for group term life, **vision exam**, dental and medical health insurance programs for classified, full-time regular employees.

The County will pay one-half of the premium cost for group term life, **vision exam**, dental and medical health insurance programs for classified, part-time regular employees who choose to participate. Regular part-time (20-30 hours) employees must pay the remaining one-half of the premium cost as a payroll deduction.

Families (dependents and spouses) of the above eligible County employees are offered insurance coverage at group rates at the expense of the employee, upon request and in accordance with provisions of the insurance contract. The premium costs must be paid as a payroll deduction **and are deducted one month in advance of insurance effective date.**

Retiree Insurance Benefits

A regular County employee's individual medical, dental **and/or vision exam** benefits may be extended up to Medicare eligibility age for employees who retire under the provisions of the Local Governmental Employees' Retirement System, either through length of service or disability.

If the retiring employee chooses the coverage, the selection must be made in writing before the employee's actual retirement date. Should additional post-retirement medical insurance coverage be obtained, the County's plan will be the secondary payee.

Payments are due the first (1st) of each month and must be received by the Finance Department no later than the fifteenth (15th) of each month. Failure to make payment by the fifteenth (15th) of the month may result in cancellation of medical, dental, **and/or vision** benefits.

Category I

For employees retiring with a minimum of ten (10) years creditable service in the Local Governmental Employees' Retirement System or the North Carolina Teachers' and State Employees' Retirement System, of which the last five (5) years must be served with Watauga County; the employee may elect to maintain coverage and be responsible for the payment of the premium to the County, or in accordance with provisions of the current insurance contractor. The premium amount for all categories will be the same rate as the County's monthly charge per employee for the group health care plan.

Category II

For Watauga County Employees retiring with a minimum of twenty (20) years **creditable service in the Local Governmental Employees' Retirement System or the North Carolina Teachers' and State Employees' Retirement System, of which the last ten (10) years must be served with Watauga County**; the employee may elect to maintain coverage and be responsible for the payment of the premium less the County supplemental amount to maintain their medical insurance coverage. The County's monthly supplement amount **will be equal to 50% of the per employee premium monthly charge.** Dental **and vision exam** benefits may be retained upon payment of the full premium by the retired employee.

Category III

For employees retiring **with more than twenty (20) years creditable service in the Local Governmental Employees' Retirement System or the North Carolina Teachers' and State Employees' Retirement System, of which the last (10) years must be served with Watauga County;** the employee may elect to maintain coverage and be responsible for the payment less the County supplement amount to maintain their medical insurance coverage. **For each added year of service after twenty (20), the County will pay an additional 2.5% of the per employee premium monthly charge up to a maximum payment of 75% of the total monthly premium for 30 years or more of service (see table below).** Dental and **vision exam** benefits may be retained upon payment of the full premium by the retired employee.

The retired employee is expected to enroll for Medicare when eligibility by age or length of disability is obtained.

RETIREE HEALTH CARE COVERAGE

Total Creditable Service Requirement	Watauga County Service	Amount of County Supplemental Payment
10 but less than 20 years	Not less than 5 years	**100%** **Retiree Responsibility**
20 years or more	Not less than 10 years	**50%** Supplement
21 years	Not less than 10 years	**52.5%** Supplement
22 years	Not less than 10 years	**55%** Supplement
23 years	Not less than 10 years	**57.5%** Supplement
24 years	Not less than 10 years	**60%** Supplement
25 years	Not less than 10 years	**62.5%** Supplement
26 years	Not less than 10 years	**65%** Supplement
27 years	Not less than 10 years	**67.5%** Supplement
28 years	Not less than 10 years	**70%** Supplement
29 years	Not less than 10 years	**72.5%** Supplement
30 years or more	Not less than 10 years	**75%** Supplement

BENEFITS REVIEW RECOMMENDATIONS

ARTICLE X, SECTION 4, LONGEVITY COMPENSATION

BENEFITS REVIEW RECOMMENDATIONS

ARTICLE X, SECTION 4, LONGEVITY COMPENSATION (CURRENT)

Longevity pay is given to regular, full-time employees with one month or more ~~continuous~~ employment with Watauga County. Years of service are computed as of December 31 of the current year. Longevity compensation is not a guaranteed benefit and will only be made contingent upon approval by the Watauga County Commissioners. Payment will be made as follows:

BENEFITS REVIEW RECOMMENDATIONS

ARTICLE X, SECTION 4. LONGEVITY COMPENSATION (PROPOSED)

Longevity pay is given to regular, full-time **and part-time benefited** employees with one month or more employment with Watauga County. Years of service are computed as of **November 30th** of the current year **and based on total continuous creditable service under the North Carolina Local Governmental Employees' Retirement System and/or North Carolina Teachers' and State Employees' Retirement System. Eligible service time includes continuous years of service within the NC Retirement Systems with less than one-year break in service.** Longevity compensation is not a guaranteed benefit and will only be made contingent upon approval by the Watauga County Commissioners. Payments will be made as follows:

BENEFITS REVIEW RECOMMENDATIONS

LONGEVITY PAYMENT SCHEDULE (REMAINS UNCHANGED)

Length of Service	Amount of Payment
1 Month but less than 5 Years	$100.00
5 but less than 10 Years	1.0% of Annual Salary
10 but less than 15 Years	1.5% of Annual Salary
15 but less than 20 Years	2.0% of Annual Salary
20 but less than 25 Years	2.5% of Annual Salary
25 or more Years	3.0% of Annual Salary

IMPLEMENATION RECOMMENDATIONS

IMPLEMENTATION RECOMMENDATIONS

- Adopt Recommended Pay Plan

- Move Employee Salaries to the Minimum Salary of their Proposed Pay Grade; or implement 5% COLA to Current Salary, Whichever is Greater. Then,

- To Begin Addressing Salary Compression, Implement the following Years of Service Recognition (Reference to Slide #8):

YEARS OF EMPLOYMENT				
0 < 3	3 < 6	6 < 9	9 < 12	12+
0%	1%	2%	3%	4%

IMPLEMENTATION COSTS

Salaries:	$1,534,325
Payroll Associated Costs (26.5%):	$406,596
Total Implementation Costs:	$1,940,921

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AGENDA ITEM 8:

APPALCART CONTRACTS FOR FY 2025

MANAGER'S COMMENTS:

Mr. Craig Hughes, AppalCART Director, will present the contracts for transportation services for the Project on Aging and Social Services Departments for FY 2025. The proposed rate for the Project on Aging, Department of Social Services, and other County functions remains the same at $2.85 per direct mile.

Mr. Hughes will present a contract for the POA meal delivery. The rate remains the same at $2.00 per direct mile.

Board action is required to approve the contracts.

For FY 24/25

Department of Social Services-Medicaid

This Agreement, effective this

1st day of July 2024, by and between

AppalCART and

Agency Name: Dept of Social Services – Watauga County

Contact person: Tom Hughes

Address: 132 Poplar Grove Connector, Suite C Boone, NC 28607

Phone: 264-8100 Fax: 265-7638 E-mail: tom.hughes@watgov.org

Rate ---- $2.85 per direct passenger mile per passenger

****

NORTH CAROLINA

AGREEMENT

WATAUGA COUNTY

THIS AGREEMENT, effective this 1st day of July, 2024 and lasting through the 30th day of June, 2025, by and between AppalCART, hereinafter referred to as the Authority; and Watauga County on behalf of the **Department of Social Services,** hereinafter referred to as DSS;

NOW, THEREFORE, in consideration of the mutual covenants set forth herein, the Authority and the DSS do agree as follows:

Section 1. Purpose of Agreement. The purpose of this Agreement is to provide for the continued implementation of a consolidated, coordinated Public Transportation Project in Watauga County, to state the

terms, conditions and mutual undertakings of the parties as to the manner in which the Authority will provide transportation services for the DSS.

Section 2. Adoption of Required Provision. This Agreement incorporates the required provisions of the North Carolina Department of Transportation/AppalCART Agreement under Project Number 25-CT-007, and subsequent agreements between the North Carolina Department of Transportation and the Authority.
The Authority shall comply with audit requirements as described in N.C.G.S 146C-6-22 and OMB Circular A-133 and shall disclose all information required by 42 USC 455.104, or 42 USC 455.105, or 42 USC 455.106.

Section 3. Scope of Work.

1. The normal hours of operation shall be between 6:00AM and 6:00PM Monday through Friday.
   The Authority will provide regularly scheduled transportation services for the DSS as may be mutually agreed upon. DSS shall notify the Authority at least one (1) business day in advance of any revisions in scheduling, or of any additions of passengers. Failure to provide adequate notification of cancellations may result in billing for services scheduled unless adverse weather was the cause (Adequate notice is defined as two hours before any revenue time spent attempting the trip. If a trip has not been canceled appropriately, the trip is marked as a "No Show". The County will be billed for the mileage to the pick-up point and back to AppalCART. A passenger with three (3) no shows in 30 days will be suspended for 30 days.). Flexible scheduling for **special activities** may be implemented as deemed appropriate as long as at least three (3) days notice is given. Ten (10) days notice is preferred for out of town trips. The routes and schedules may be modified from time to time by the Authority in order to provide for a more effective and efficient provision of service to the citizens of Watauga County.
2. The Authority will be responsible for maintaining insurance to meet the requirements of
   the North Carolina Department of Transportation, FTA, and the DSS with respect to liability insurance, vehicle inspections, and drivers including licensing, background checks, and drug and alcohol testing. It is agreed that coverage limits will meet the amount required for common carrier passenger vehicles by the

North Carolina Utilities Commission. Insurance Company is:

NCACC RMP.L&P Policy # LP-AP-473-16.

3. First lien holder on all vehicles titled to the Authority shall be the North Carolina Department of Transportation - Integrated Mobility Division.
4. The Authority will ensure that the vehicles will be equipped, maintained, operated and managed in a safe, efficient and businesslike manner, and the parties do further agree that the driver shall have the final control regarding safety and whether or not the routes should be followed on days of adverse weather.
5. The Authority will provide driver training for new drivers and refresher courses for long-term drivers, to ensure that all drivers have adequate knowledge of passenger safety, CPR, first aid, defensive driving and preventive vehicle maintenance.
6. Vehicles will be equipped with a land transportation communication radio system.
7. The Authority shall commence performance of this contract on the 1st day of July, 2024, and shall complete, renew, or amend this contract as appropriate to complete the terms, conditions and required provisions of the North Carolina Department of Transportation/AppalCART under Project Number 25-CT-007.
8. By mutual agreement, the unit rate of said service shall be $2.85 per direct vehicle mile. The Authority will submit itemized invoices to the DSS on a semi-monthly basis. DSS will have two weeks to submit the payment authorizations to NC Tracks and shall notify the Authority upon successful submission of the authorizations (If authorizations are not submitted within two weeks, then AppalCART may bill Watauga County for the services.). The Authority will then submit the requests for payment to NC Tracks. All costs charged to the DSS including any approved services performed by the Authority shall be supported by properly executed payrolls, time records, invoices, canceled checks, deposit slips, or vouchers evidencing in detail the nature and property of the charges. The Authority will use billing codes specified by DSS on invoices, and will report no-shows, daily, and cancellations on a monthly basis.
    - All claims that DSS has authorized, but cannot be processed through NC Tracks will be billed to Watauga County.

9. The Authority shall retain all records pertaining to this Project for a period of three (3) years from the date of this Agreement. The Authority shall permit North Carolina Department of Transportation - Integrated Mobility Division and DSS to inspect all work, materials, payrolls, and other data and records with regard to the Project and to audit the books, records and accounts of the Authority pertaining to the Project.
10. Passenger complaints should be reported to the Authority's Director 828.297.1300 x 104 director@appalcart.com
11. Names of Board Members and Managers are posted and updated at www.appalcart.com , any changes will be reported to DSS.
12. If the Authority becomes excluded from participation in this agreement, the DSS will be promptly notified.

Section 4. Rate Changes. The Authority reserves the right to renegotiate this agreement when "Managed Care" is fully implemented in Watauga County.

Section 5. Termination of Agreement. Either party may terminate the Agreement by giving the other party sixty (60) days advance written notice.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement the day and year first above written.

BY: _____

Larry Turnbow
Watauga County Commissioners Chair

ATTEST:

_____
Anita Fogle
Clerk to the County Commissioners

BY: _____

Frank David V
AppalCART Board Chair

ATTEST:

_____
Anna Goddard
Clerk to the AppalCART Board

For FY 24/25

Watauga County Project on Aging

This Agreement, effective this

1st day of July 2024, by and between

AppalCART and

Agency Name: Project on Aging – Watauga County

Contact Person: Angie Boitnotte

Address: 132 Poplar Grove Connector, Suite A Boone, NC 28607

Phone: 265.8092 Fax: 264-2060 E-mail: angie.boitnotte@watgov.org

Rate: $2.85 per direct mile

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NORTH CAROLINA

AGREEMENT

WATAUGA COUNTY

THIS AGREEMENT, effective this 1st day of July, 2024 and lasting through the 30th day of June, 2025, by and between AppalCART, hereinafter referred to as the Authority; and Watauga County on behalf of the **PROJECT ON AGING,** hereinafter referred to as Project on Aging;

NOW, THEREFORE, in consideration of the mutual covenants set forth herein, the Authority and the Project on Aging do agree as follows:

Section 1. Purpose of Agreement. The purpose of this Agreement is to provide for the continued implementation of a consolidated, coordinated Public Transportation Project in Watauga County, to state the terms, conditions and mutual undertakings of the parties as to the manner in which the Authority will provide transportation services for the Project on Aging.

Section 2. Adoption of Required Provision. This Agreement incorporates the required provisions of the North Carolina Department of Transportation/AppalCART Agreement under Project Number 25-CT-007, and subsequent agreements between the North Carolina Department of Transportation and the Authority.
The Authority shall comply with audit requirements as described in N.C.G.S 146C-6-22 and OMB Circular A-133 and shall disclose all information required by 42 USC 455.104, or 42 USC 455.105, or 42 USC 455.106.

Section 3. Scope of Work.

1. The normal hours of operation shall be between 6:00AM and 6:00PM Monday through Friday.
   The Authority will provide regularly scheduled transportation services for the Project on Aging as may be mutually agreed upon. The Project on Aging shall notify the Authority at least one (1) business day in advance of any revisions in scheduling, or of any additions of passengers. Failure to provide adequate notification of cancellations may result in billing for services scheduled unless adverse weather was the cause. Flexible scheduling for special activities may be implemented as deemed appropriate as long as at least three (3) days notice is given. The routes and schedules may be modified from time to time by the Authority in order to provide for a more effective and efficient provision of service to the citizens of Watauga County.
2. The Authority will be responsible for maintaining insurance to meet the requirements of
   the North Carolina Department of Transportation, FTA, and the Project on Aging with respect to liability insurance, vehicle inspections, and drivers including licensing, background checks, and drug and alcohol testing. It is agreed that coverage limits will meet the amount required for common carrier passenger

vehicles by the North Carolina Utilities Commission. The Authority's Insurance Company is NCACC RMP.L&P Policy # LP-AP-473-16.

3. First lien holder on all vehicles titled to the Authority shall be the North Carolina Department of Transportation - Integrated Mobility Division.
4. The Authority will ensure that the vehicles will be equipped, maintained, operated and managed in a safe, efficient and businesslike manner, and the parties do further agree that the driver shall have the final control regarding safety and whether or not the routes should be followed on days of adverse weather.
5. The Authority will provide driver training for new drivers and refresher courses for long-term drivers, to ensure that all drivers have adequate knowledge of passenger safety, CPR, first aid, defensive driving and preventive vehicle maintenance.
6. Vehicles will be equipped with a land transportation communication radio system.
7. The Authority shall commence performance of this contract on the 1st day of July, 2024, and shall complete, renew, or amend this contract as appropriate to complete the terms, conditions and required provisions of the North Carolina Department of Transportation/AppalCART under Project Number 25-CT-007.
8. By mutual agreement, the unit rate of said service shall be $2.85 per direct vehicle mile. The Authority will submit itemized invoices to the Project on Aging on a monthly basis, payment of terms is thirty (30) days net. All costs charged to the Project on Aging, including any approved services performed by the Authority, shall be supported by properly executed payrolls, time records, invoices, canceled checks, deposit slips, or vouchers evidencing in detail the nature and property of the charges. The Authority will use billing codes specified by the Project on Aging on invoices, and will report no-shows daily, and cancellations on a monthly basis.
9. The Authority shall retain all records pertaining to this Project for a period of three (3) years from the date of this Agreement. The Authority shall permit North Carolina Department of Transportation – Integrated Mobility Division and the Watauga County Project on Aging to inspect all work, materials, payrolls, and other

data and records with regard to the Project and to audit the books, records and accounts of the Authority pertaining to the Project.

10. Passenger complaints should be reported to the Authority's Director 828.297.1300 x 104 director@appalcart.com
11. Names of Board Members and Managers are posted and updated at www.appalcart.com , any changes will be reported to the Project on Aging.
12. If the Authority becomes excluded from participation in this agreement, the Project on Aging will be promptly notified.
13. The Project on Aging Directors will complete the Client Registration Forms and determine eligibility for transportation services. The Authority will refer them to the appropriate Senior Center Director (LEH or WWCC).
14. At the initial registration/orientation, the Project on Aging will provide participants with a letter which states the following: cost of the service, funding source, purpose of consumer contributions, and procedures for making a donation. The Project on Aging is responsible for the collection and reporting of all donations. If a participant attempts to make a donation to the Authority's staff, they should be referred to a Project on Aging staff member. The Authority should refer participants to the Project on Aging if there are any questions regarding consumer contributions.

Section 4. Termination of Agreement. Either party may terminate the Agreement by giving the other party sixty (60) days advance written notice.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement the day and year first above written.

BY: _____

Larry Turnbow
Watauga County Commissioners Chair

ATTEST:

_____

Anita Fogle
Clerk to the County Commissioners

BY: _____

Frank David V
AppalCART Board Chair

ATTEST:

_____
Anna Goddard
Clerk to the AppalCART Board

For FY 24/25

Watauga County Project on Aging-Meals

This Agreement, effective this

1st day of July 2024, by and between

AppalCART and

Agency Name: Project on Aging – Watauga County

Contact Person: Angie Boitnotte

Address: 132 Poplar Grove Connector, Suite A Boone, NC 28607

Phone: 265.8092 Fax: 264-2060 E-mail: angie.boitnotte@watgov.org

Rate: $2.00 per direct vehicle mile

****

NORTH CAROLINA

AGREEMENT

WATAUGA COUNTY

THIS AGREEMENT, effective this 1st day of July, 2024 and lasting through the 30th day of June, 2025, by and between AppalCART, hereinafter referred to as the Authority; and Watauga County on behalf of the **PROJECT ON AGING,** hereinafter referred to as Project on Aging;

NOW, THEREFORE, in consideration of the mutual covenants set forth herein, the Authority and the Project on Aging do agree as follows:

Section 1. Purpose of Agreement. The purpose of this Agreement is to provide for the continued implementation of a consolidated, coordinated Public Transportation Project in Watauga County, to state the terms, conditions and mutual undertakings of the parties as to the manner in which the Authority will provide transportation services for the Project on Aging.

Section 2. Adoption of Required Provision. This Agreement incorporates the required provisions of the North Carolina Department of Transportation/AppalCART Agreement under Project Number 25-CT-007, and subsequent agreements between the North Carolina Department of Transportation and the Authority.
The Authority shall comply with audit requirements as described in N.C.G.S 146C-6-22 and OMB Circular A-133 and shall disclose all information required by 42 USC 455.104, or 42 USC 455.105, or 42 USC 455.106.

Section 3. Scope of Work.

1. The normal hours of operation shall be between 6:00AM and 6:00PM Monday through Friday.
   The Authority will provide regularly scheduled transportation of meals for the Project on Aging as may be mutually agreed upon. The routes and schedules may be modified from time to time by the Authority in order to provide for a more effective and efficient provision of service to the citizens of Watauga County.
2. The Authority will be responsible for maintaining insurance to meet the requirements of the North Carolina Department of Transportation, FTA, and the Project on Aging with respect to liability insurance, vehicle inspections, and drivers including licensing, background checks, and drug and alcohol testing. It is agreed that coverage limits will meet the amount required for common carrier passenger vehicles by the North Carolina Utilities Commission. The Authority's Insurance Company is NCACC RMP.L&P Policy # LP-AP-473-16.
3. First lien holder on all vehicles titled to the Authority shall be the North Carolina Department of Transportation – Integrated Mobility Division (NCDOT-IMD).

4. The Authority will ensure that the vehicles will be equipped, maintained, operated and managed in a safe, efficient and businesslike manner, and the parties do further agree that the driver shall have the final control regarding safety and whether or not the routes should be followed on days of adverse weather.
5. The Authority will provide driver training for new drivers and refresher courses for long-term drivers, to ensure that all drivers have adequate knowledge of passenger safety, CPR, first aid, defensive driving and preventive vehicle maintenance.
6. Vehicles will be equipped with a land transportation communication radio system.
7. The Authority shall commence performance of this contract on the 1st day of July, 2024, and shall complete, renew, or amend this contract as appropriate to complete the terms, conditions and required provisions of the North Carolina Department of Transportation/AppalCART under Project Number 25-CT-007.
8. By mutual agreement, the unit rate of said service shall be $2.00 per direct vehicle mile. The Authority will submit itemized invoices to the Project on Aging on a monthly basis, payment of terms is thirty (30) days net. All costs charged to the Project on Aging, including any approved services performed by the Authority, shall be supported by properly executed payrolls, time records, invoices, canceled checks, deposit slips, or vouchers evidencing in detail the nature and property of the charges. The Authority will use billing codes specified by the Project on Aging on invoices, and will report no-shows daily, and cancellations on a monthly basis.
9. The Authority shall retain all records pertaining to this Project for a period of three (3) years from the date of this Agreement. The Authority shall permit North Carolina Department of Transportation – Integrated Mobility Division and the Watauga County Project on Aging to inspect all work, materials, payrolls, and other data and records with regard to the Project and to audit the books, records and accounts of the Authority pertaining to the Project.
10. Passenger complaints should be reported to the Authority's Director 828.297.1300 x 104 director@appalcart.com

11. Names of Board Members and Managers are posted and updated at www.appalcart.com , any changes will be reported to the Project on Aging.
12. If the Authority becomes excluded from participation in this agreement, the Project on Aging will be promptly notified.

Section 4. Termination of Agreement. Either party may terminate the Agreement by giving the other party sixty (60) days advance written notice.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement the day and year first above written.

BY: _____

Larry Turnbow
Watauga County Commissioners Chair

ATTEST:

_____
Anita Fogle
Clerk to the County Commissioners

BY: _____

Frank David V
AppalCART Board Chair

ATTEST:

_____
Anna Goddard
Clerk to the AppalCART Board

For FY 24/25

Watauga County: Non-Medicaid Transportation

This Agreement, effective this

1st day of July, 2024, by and between

AppalCART and

Agency Name: Watauga County

Contact person: Deron Geouque

Address: 814 West King St, Suite 205 Boone, NC 28607

Phone: 265-8000 E-mail: Deron.Geouque@watgov.org

Rate ---- $2.85 per direct mile

****

THIS AGREEMENT, effective this 1st day of July, 2024 and lasting through the 30th day of June, 2025, by and between AppalCART, hereinafter referred to as the Authority; and Watauga County;

NOW, THEREFORE, in consideration of the mutual covenants set forth herein, the Authority and the County do agree as follows:

Section 1. Purpose of Agreement. The purpose of this Agreement is to provide for the continued implementation of a consolidated, coordinated Public Transportation Project in Watauga County, to state the terms, conditions and mutual undertakings of the parties as to the manner in which the Authority will provide transportation services for the County.

Section 2. Adoption of Required Provision. This Agreement incorporates the required provisions of the North Carolina Department of Transportation/AppalCART Agreement under Project Number 25-CT-007, and subsequent agreements between the North Carolina Department of Transportation and the Authority.

The Authority shall comply with audit requirements as described in N.C.G.S 146C-6-22 and OMB Circular A-133 and shall disclose all information required by 42 USC 455.104, or 42 USC 455.105, or 42 USC 455.106.

Section 3. Scope of Work.

1. The normal hours of operation shall be between 6:00AM and 6:00PM Monday through Friday.

   The Authority will provide regularly scheduled transportation services for the County as may be mutually agreed upon. Flexible scheduling for special activities may be implemented as deemed appropriate as long as at least three (3) days notice is given. Ten (10) days notice is preferred for out of town trips. The routes and schedules may be modified from time to time by the Authority in order to provide for a more effective and efficient provision of service to the citizens of Watauga County.

2. The Authority will be responsible for maintaining insurance to meet the requirements of the North Carolina Department of Transportation, FTA, and the County with respect to liability insurance, vehicle inspections, and drivers including licensing, background checks, and drug and alcohol testing. It is agreed that coverage limits will meet the amount required for common carrier passenger vehicles by the North Carolina Utilities Commission. Insurance Company is:

   NCACC RMP.L&P Policy # LP-AP-473-16.

3. The Authority will ensure that the vehicles will be equipped, maintained, operated and managed in a safe, efficient and businesslike manner, and the parties do further agree that the driver shall have the final control regarding safety and whether or not the routes should be followed on days of adverse weather.

4. The Authority will provide driver training for new drivers and refresher courses for long-term drivers, to ensure that all drivers have adequate knowledge of passenger safety, CPR, first aid, defensive driving and preventive vehicle maintenance.

5. The Authority shall commence performance of this contract on the 1st day of July, 2024, and shall complete, renew, or amend this contract as appropriate to complete the terms, conditions and required provisions of the North Carolina Department of Transportation/AppalCART under Project Number 25-CT-007.

6. By mutual agreement, the unit rate of said service shall be $2.85 per direct mile. The Authority will submit itemized invoices to the County on a monthly basis, payment of terms is thirty (30) days net.
7. The Authority shall retain all records pertaining to this Project for a period of three (3) years from the date of this Agreement. The Authority shall permit North Carolina Department of Transportation – Integrated Mobility Division and County to inspect all work, materials, payrolls, and other data and records with regard to the Project and to audit the books, records and accounts of the Authority pertaining to the Project.
8. Passenger complaints should be reported to the Authority's Director 828.297.1300 x 104 director@appalcart.com
9. If the Authority becomes excluded from participation in this agreement, the County will be promptly notified.

Section 4. Termination of Agreement. Either party may terminate the Agreement by giving the other party sixty (60) days advance written notice.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement the day and year first above written.

BY: _____

Larry Turnbow
Watauga County Commissioners Chair

ATTEST:

_____
Anita Fogle
Clerk to the County Commissioners

BY: _____

Frank David V
AppalCART Board Chair

ATTEST:

_____
Anna Goddard
Clerk to the AppalCART Board

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AGENDA ITEM 9:

PROPOSAL TO CONTRACT WITH HIGH COUNTRY COUNCIL OF GOVERNMENTS FOR AN UPDATE OF THE COMPREHENSIVE LAND USE PLAN

MANAGER'S COMMENTS:

Mr. Jason Walker, Planning and Inspections Director, will request the Board contract with High Country Council of Governments to update the Comprehensive Land Use Plan. The cost is a lump sum of $25,000 and will take 18 months to complete.

Board action is required to approve the contract with High Country Council of Governments to update the Comprehensive Land Use Plan in the amount of $25,000.

HIGH COUNTRY
COUNCIL OF GOVERNMENTS

PROPOSAL
Watauga County Comprehensive Land Use Plan

Provided to: Watauga County, North Carolina
Submitted by: High Country Council of Governments

High Country Council of Governments (HCCOG) proposes to contract with Watauga County, North Carolina (County) for the development of a Comprehensive Land Use Plan (Project). The Project is intended to assist the County in identifying land use priorities, establishing goals for the future, and complying with the new requirements found in Chapter 160D of the North Carolina General Statutes. This proposal contains a scope of services, process, schedule, and cost for the Project.

Scope of Services

1) **Plan Development**
    a. Development of a plan that addresses and analyzes the topics listed below:
        – demographics
        – environmental constraints
        – existing land use
        – future land use
        – housing
        – land supply and infill development
        – land use policies and regulations (floodplain, sedimentation and erosion control, Foscoe zoning, High Impact Land Uses, etc.)
        – subdivision regulations
        – utilities
    b. Development of goals and recommendations designed to guide land use policy decisions for the County over a 20-year plan horizon.

2) **Public Involvement**
    a. Facilitation of meetings of the Plan Oversight Group (or Planning Board, per County preference)
    b. Development of an online survey to gather public input for the plan.
    c. Facilitation of up to two public meetings to discuss the purpose of the plan, present draft recommendations, and solicit public input.
    d. Meet with stakeholders to gather input for the plan. Stakeholders will include:
        - County Department Heads
        - AppalCART
        - AppHealthCare
        - NC Department of Transportation
        - Watauga County School System
        - Caldwell Community College and Technical Institute
        - ASU

- Municipalities in the County
- High Country Council of Governments

Plan Development Process

Development of the Project will include, but not be limited to, the following:

1) Hold workshop with County Board of Commissioners to evaluate project goals, desired outcomes, range of preferred recommendations, and any specific topics to be addressed in Plan
2) Compilation and analysis of information related to demographics, environmental constraints, housing, land supply, development, transportation, and utilities
3) Analysis of existing land use regulations and policies related to zoning and subdivisions
4) Development of goals and recommendations
5) Public involvement activities detailed above
6) Presentation of draft Plan to Watauga County Planning Board
7) Presentation of draft Plan to Watauga County Board of Commissioners

Items to be provided by the County

1) Digital copies of the County's land use regulations and policies
2) A digital or print copy of the County's most up-to-date zoning map
3) Cost of advertising, direct mailing, or other means to promote the citizen survey
4) Provision of meeting space for Plan Oversight Group meetings and public meetings

Cost

HCCOG proposes to contract with the County to develop the Comprehensive Land Use Plan, as described above, for a lump sum fee of $25,000.

Schedule

Project could begin on June 1, 2024 HCCOG can complete the Comprehensive Land Use Plan within 18 months of contract execution.

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AGENDA ITEM 10:

MISCELLANEOUS ADMINISTRATIVE MATTERS

A. Presentation of the FY 2025 Capital Improvement Plan (CIP)

MANAGER'S COMMENTS:

The County Manager will present the FY 2024-2025 Capital Improvement Plan (CIP) for your review prior to discussion during the upcoming budget work sessions. A link to the FY 2024-2025 CIP and Budget documents will be provided on the day of the meeting.

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AGENDA ITEM 10:

MISCELLANEOUS ADMINISTRATIVE MATTERS

B. Presentation of the Manager's FY 2025 Recommended Budget

MANAGER'S COMMENTS:

The Manager will present his recommended FY 2025 Budget at the meeting and review highlights. If you have questions, please feel free to call or discuss at the budget work sessions scheduled on Monday, May 13, 2024 beginning at 12:00 P.M. and Tuesday, May 13, 2024 at 9:00 A.M.

The recommended Budget will be available for public inspection on the County's website and at the County Manager's Office.

A public hearing will be held on May 21, 2024, at 5:30 P.M. to allow citizen comment on the proposed budget.

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AGENDA ITEM 10:

MISCELLANEOUS ADMINISTRATIVE MATTERS

C. Boards and Commissions

MANAGER'S COMMENTS:

Social Services Advisory Board
Matthew Rollins has been recommended for appointment to the Social Services Advisory Board for a four-year term. This is a first reading and, therefore, no action is required.

Anita.Fogle

From: Tom.Hughes
Sent: Wednesday, May 1, 2024 8:46 AM
To: Anita.Fogle
Cc: Deron.Geouque
Subject: DSS Advisory Board request

Dear Anita,

A while back Detective Matt F. Rollins submitted request to be considered for DSS Board appointment. Yesterday, at our DSS Board Meeting, all present (including Charlie Wallin) agreed that Matt would be an excellent choice for this placement.

Commissioner Wallin requested that DSS Director advise County Manager and County Clerk that item should be heard next Commissioner meeting so process could be streamlined.

I believe that Detective Rollins will offer great law enforcement perspective to our DSS Board

Thanks and let me know if you need anything else from me.

Tom Hughes, DSS Dir.
Watauga County Department of Social Services
132 Poplar Grove Connector, Suite C
Boone, North Carolina 28607
Office: 828.265.8100
Fax: 828.265.7638

"Real strength has to do with helping others." -Mr. Rogers

Volunteer Application
Watauga County Boards And Commissions

If you are a Watauga County resident, at least 18 years old, and willing to volunteer your time and expertise to your community, please complete the application below and click on Print Form. Please sign and mail or fax to:

Watauga County Commissioners' Office
814 West King Street, Suite 205
Boone, NC 28607
Phone: (828) 265-8000
Fax: (828) 264-3230

Name: Matthew Fred Rollins

Home Address: 238 Mine Branch Road

City: Blowing Rock Zip: NC

Telephone: (H) 828-773-1104 (W) 828-265-5718 (Fax) n/a

Email: matthewfrollins@gmail.com

Place of Employment: Watauga County Sheriff's Office

Job Title: Detective

In Order To Assure County wide Representation Please Indicate Your Township Of Residence:

◯ Bald Mountain	◯ Stony Fork	◯ Watauga
◯ New River	◯ Brushy Fork	◯ Cove Creek
◯ Beaver Dam	◯ Meat Camp	◯ Shawneehaw
◯ Blue Ridge	◉ Blowing Rock	◯ Laurel Creek
◯ Elk	◯ North Fork	◯ Boone

In addition, Please Indicate If You Live In One Of The Following Areas:

◯ Foscoe-Grandfather Community	◯ Valle Crucis Historic District
◯ Howards Creek Watershed	◯ Winklers Creek Watershed
◯ South Fork New River Watershed	◯ Extraterritorial Area

We Ask Your Help In Assuring Diversity Of Membership By Age, Gender, And Race, By Answering The Following Questions

Gender

◉ Male
◯ Female

Ethnic Background

◯ African American
◉ Caucasian
◯ Native American
◯ Hispanic
◯ Other

Please List (In Order Of Preference) The Boards/Commissions On Which You Would Be Willing To Serve.

1. Social Services Board
2.
3.

Volunteer Application
Watauga County Boards And Commissions
(Continued)

Please list any work, volunteer, and/or other experience you would like to have considered in the review of your application.

Work Experience:

I have worked at the Watauga County Sheriff's Office for almost 18 years. I began as a detention officer on July 1st, 2006 and transitioned to a Patrol Officer on February 3rd, 2007. I remained on the road until December of 2017 when I was promoted to a Detective in the Criminal Investigations Unit. I have undergone many cases involving the mistreatment of children in both the physical sense and the non-physical. I have successfully prosecuted sexual offenders and worked alongside the Department of Social Services in multiple cases. On top of all of this, I have undergone different kind of trainings where I have learned about the sexual abuse, the physical abuse, the maltreatment of children in multiple different areas of their lives.

Volunteer Experience:

Other Experience:

I am a father of two. A 13 year old and a 2 1/2 month old. On top of this, through my work I have assisted DSS in the past with checking on children and removing children from homes.

Other Comments:

I am a passionate individual when it comes to the protection of the most vulnerable of our society. This includes children and adults who may not have the ability to speak for themselves. I would very much like to be active in the Social Services Board to help do this for those such people in Watauga County.

Signature: _____ **Date:** _____

Print Form Reset Form

AGENDA ITEM 10:

MISCELLANEOUS ADMINISTRATIVE MATTERS

D. Announcements

MANAGER'S COMMENTS:

The Board of Equalization & Review (E&R) have meetings scheduled at 2:00 P.M. on Wednesday, May 8 and Thursday, May 9, 2024. The meetings will be held in the Commissioners' Conference Room. The Adjournment date for Board of E&R is Friday, May 10, 2024 at 5:00 P.M.

The following Special Meetings will be held in May 2024:

May 13 Budget Work Session beginning at 12:00 P.M. in the Commissioners Conference Room
May 14 Budget Work Session beginning at 9:00 A.M. in the Commissioners Conference Room
May 21 A Public Hearing to allow for citizen comment on the Proposed Budget will be held at 5:30 P.M. in the Commissioners Board Room.

The Trustees of Caldwell Community College & Technical Institute have invited the Board of Commissioners to a meeting on Wednesday, May 15, 2024, at 6:00 P.M. at the Watauga Campus on Hwy 105 Bypass, Boone NC, in the Student Services Center.

The North Carolina Association of County Commissioners will hold the 2024 County Advocacy Days in Raleigh on June 11 & 12. Steering Committee Meetings and a dinner will be on the 11th with the Legislative Program presented on the 12th. The Clerk to the Board will be happy to assist with your registration, if you plan to attend.

AGENDA ITEM 11:

BREAK

April 12, 2024

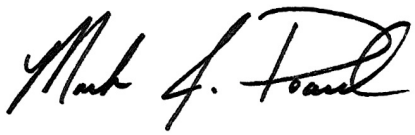
Mr. Deron Geouque
Watauga County Manager
814 West King Street, Suite 205
Boone, NC 28607

Dear Mr. Geouque:

The Trustees of Caldwell Community College and Technical Institute would like to schedule a joint meeting of the College Board of Trustees, the Watauga County Board of Education and the Watauga County Commissioners on Wednesday, May 15, 2023 at 6:00 p.m. at the Student Services Center on our Watauga Campus. A meal will be provided.

Please check the date and time with the Watauga County Commissioners and let my assistant, Christina Bryant, know either by e-mail: clbryant@cccti.edu or phone: 828-726-2240, if May 15th at 6:00 p.m. will accommodate the Watauga County Commissioner's schedule.

Sincerely,



Mark J. Poarch, Ed.D.
President

Cc: Larry Turnbow, Chairman
Watauga County Commissioners

2024 COUNTY ADVOCACY DAYS

We are excited to welcome county leaders to Raleigh for the annual County Advocacy Days, June 11-12, 2024. NEW THIS YEAR will include optional steering committee meetings on June 11, 2024.

-There will be three joint steering committee meetings that offer county leaders an opportunity to hear from issue experts. Steering committee registration is free and registration is required. You can add a steering committee meeting to your registration by selecting which meeting you want to attend.

-Following steering committees, County Advocacy Days will feature a dinner event at the Raleigh Marriott City Center that will bring together county officials and legislators for an opportunity to share a meal and discuss shared priorities. We will also feature a speaking program with legislative leaders. A reception will begin at 6:00 PM and dinner service begins at 7:00 PM.

-On Wednesday, June 12, 2024, please join us at the Quorum Center for coffee and refreshments from 7:30 AM-9:30 AM with a program beginning at 8:00 AM. The event venue is located at 323 W Jones Street in downtown Raleigh, on the ground floor lobby of the building. Important information will be provided to guide you through your day at the Legislative Building.

Agenda at a Glance:

STEERING COMMITTEE MEETINGS — Tuesday, June 11
Networking Reception: 1:00 p.m. // Meeting: 2:00 p.m.
Sheraton Raleigh Hotel

DINNER — Tuesday, June 11
Reception: 6:00 p.m. // Dinner: 7:00 p.m.
Raleigh Marriott City Center

LEGISLATIVE PROGRAM — Wednesday, June 12
Refreshments: 7:30 a.m. // Program: 8:00 a.m.
Quorum Center & Legislative Building

Ticket Options

Details	Price	Qty
COUNTY ADVOCACY DAYS Registration - County Commissioners and Staff show details +	$75.00 (USD)	0
COUNTY ADVOCACY DAYS Registration - Guests of County Officials and Legislators show details +	$40.00 (USD)	0
STEERING COMMITTEE Registration - General Government / HHS / JPS show details +	$0.00 (USD)	0
STEERING COMMITTEE Registration - Agriculture / Environment / Tax and Finance show details +	$0.00 (USD)	0
STEERING COMMITTEE Registration - Public Education show details +	$0.00 (USD)	0

Add to Event Cart

Event Details

SHERATON RALEIGH HOTEL – Steering Committee Meetings, Tuesday, June 11
RALEIGH MARRIOTT CITY CENTER – County Advocacy Days Reception & Dinner, Tuesday, June 11
QUORUM CENTER – Networking coffee and refreshments and brief program, Wednesday, June 12

Event Location

Venue: Downtown Raleigh

Address:
Sheraton Raleigh Hotel, Raleigh Marriott City Center, Quorum Center, North Carolina, United States

Description:
Sheraton Raleigh Hotel - 421 S Salisbury Street / Raleigh Marriott City Center - 500 Fayetteville Street / Quorum Center - 323 W Jones Street more...

RECENT POSTS

Notes on Online Registration

Looking for an event not listed here?

REGISTER HERE FOR UPCOMING EVENTS

AGENDA ITEM 12:

CLOSED SESSION

Attorney/Client Matters – G. S. 143-318.11(a)(3)