



Medford City Council Meeting

Agenda

March 21, 2019

6:00 P.M.

Medford City Hall, Council Chambers
411 West 8th Street, Medford, Oregon

10. Roll Call

Employee Recognition

20. Recognitions, Community Group Reports

30. Oral Requests and Communications from the Audience

Comments will be limited to 4 minutes per individual, group or organization. PLEASE SIGN IN.

40. Public Hearings

Comments are limited to a total of 30 minutes for applicants and/or their representatives. You may request a 5-minute rebuttal time. Appellants and/or their representatives are limited to a total of 30 minutes and if the applicant is not the appellant they will also be allowed a total of 30 minutes. All others will be limited to 4 minutes. PLEASE SIGN IN.

40.1 COUNCIL BILL 2019-19 A resolution adopting a seventh Supplemental Budget for the 2017-19 biennium.

50. Approval or Correction of the Minutes of the March 7, 2019 Regular Meeting

60. Consent Calendar

60.1 COUNCIL BILL 2019-20 An ordinance awarding a contract in an amount of \$176,455.24 to Blackline, Inc. to perform slurry seal on various city streets.

60.2 COUNCIL BILL 2019-21 An ordinance authorizing execution for an Intergovernmental Agreement with Oregon Department of Transportation for a grant for Safe Routes to Schools (SRTS) projects.

60.3 COUNCIL BILL 2019-22 An ordinance granting to ExteNet Systems, Inc., the non-exclusive privilege (Franchise) to use the public way to locate, construct, operate and maintain Facilities within the City of Medford.

70. Items Removed from Consent Calendar

80. Ordinances and Resolutions

90. Council Business

90.1 Proclamations issued:

Welcome Home Vietnam Veterans Day – March 29, 2019

90.2 Committee Reports and Communications

100. City Manager and Staff Reports

100.1 2019 Federal Legislative Agenda

100.2 Wildfire Hazard Mitigation

100.3 Severe Weather Discussion

100.4 Further reports from City Manager

110. Adjournment



CITY OF MEDFORD AGENDA ITEM COMMENTARY

Item No: 40.1

www.cityofmedford.org

DEPARTMENT: Finance
PHONE: (541) 774-2030
STAFF CONTACT: Ryan Martin, CFO/Assistant City Manager

AGENDA SECTION: Public Hearings
MEETING DATE: March 21, 2019

COUNCIL BILL 2019-19

A resolution adopting a seventh Supplemental Budget for the 2017-19 biennium.

SUMMARY AND BACKGROUND

Council is requested to consider a seventh supplemental budget for the 2017-2019 biennium which will affect six departments and two funds.

The total impact is an \$865,000 increase in appropriations for the 2017-2019 biennium. ORS 294.471 provides for a Supplemental Budget process. This supplemental budget is being presented in a public hearing due to the Fleet Maintenance Fund increasing appropriations by more than 10%. When this occurs, a public hearing is required.

PREVIOUS COUNCIL ACTIONS

June 15, 2017 – Council approved Resolution 2017-57 adopting the 2017-2019 biennial budget.

October 19, 2017 – Council approved Resolution 2017-122 adopting first supplemental budget for the 2017-2019 biennium.

December 7, 2017 – Council approved Resolution 2017-138 adopting a second Supplemental Budget for the 2017-19 biennium.

June 7, 2018 – Council approved Resolution 2018-51 adopting a third Supplemental Budget for the 2017-2019 biennium.

September 20, 2018 – Council approved Resolution 2018-112 adopting a fourth Supplemental Budget for the 2017-2019 biennium.

December 20, 2018 – Council approved Resolution 2018-138 adopting a fifth Supplemental Budget for the 2017-2019 biennium.

February 7, 2018 – Council approved Resolution 2019-08 adopting a sixth Supplemental Budget for the 2017-2019 biennium.

ANALYSIS

General Fund (100):

Parks, Recreation, & Facilities

Supplemental Budget #1

The Parks, Recreation & Facilities Department is requesting a supplemental budget to recognize and appropriate unexpected revenue in the amount of \$9,500.

In 2018, a park maintenance irrigation maintenance truck owned by the City was totaled in an accident where a private party was deemed responsible. This revenue is the settlement from the private party's insurance company per their valuation of the City vehicle.



CITY OF MEDFORD AGENDA ITEM COMMENTARY

Item No: 40.1

www.cityofmedford.org

The department is requesting to use these funds to purchase a small electric maintenance vehicle to be used at U.S. Cellular Community Park as there are not adequate funds available to replace the same size and type of vehicle.

Revenue: \$9,500 increase to Damage Claims line item

Expense: \$9,500 increase to Park Maintenance/Motive Equipment line item

Supplemental Budget #2

The Parks, Recreation, and Facilities Department is requesting a supplemental budget to recognize and appropriate a reimbursement from the Medford Water Commission in the amount of \$10,800 for the ventilation repairs on the Lausmann Annex.

The Medford Water Commission agreed to pay for a portion of the repairs (based off square footage occupied) of the ventilation system at the Lausmann Annex.

Revenue: \$10,800 increase to MWC Reimbursements

Expense: \$10,800 increase to Contingency budget

Appropriation Transfer #1

The Parks, Recreation, and Facilities Department is requesting an appropriation transfer in the amount of \$90,000 for construction costs.

The Legal Department is moving to the second floor of City Hall in the vacant space that formerly housed the detectives. The Finance Department will be expanding into the current Legal Department area on the third floor. Due to retirements and vacancies, the Finance and Legal Departments have the ability to transfer the monies needed for construction to avoid transferring from Contingency.

Transferred From:

\$45,000 decrease of Finance – Salaries & Wages

\$45,000 decrease of Legal – Salaries & Wages

Transferred To:

\$90,000 increase to Facilities – CIP

Appropriation Transfer #2

The Parks, Recreation, and Facilities Department is requesting an appropriation transfer in the amount of \$246,900 for repairs to the ventilation system and HVAC unit at the Lausmann Annex that was approved by Council at the February 21, 2019 meeting.

The City has entered into a contract with Van Row Mechanical in the amount of \$199,700 for emergency air conditioning system repairs and has also entered into a contract with S&S Sheet Metal in the amount of \$47,200 for ventilation system modifications to address air-quality concerns at the Lausmann Annex.



CITY OF MEDFORD AGENDA ITEM COMMENTARY

Item No: 40.1

www.cityofmedford.org

Transferred From:
\$246,900 decrease in contingency

Transferred To:
\$246,900 increase in Facilities Management CIP

The balance of contingency at the beginning of the biennium was \$13,727,000. After this transfer, the balance of contingency will be \$13,659,880 – a difference of \$67,120.

Fire Department

Fire Department Supplemental Budget #1

The Fire Department is requesting a Supplemental Budget to recognize revenue received following the State Fire Marshal deployment of personnel for the Camp Fire.

Revenue: \$172,500 increase to conflagration revenue line item
Expense: \$172,500 increase to Operations Wages & Salaries, Overtime

Fire Department Supplemental Budget #2

The Fire Department is requesting a Supplemental Budget to recognize revenue received following the State Fire Marshal deployment of personnel for the Garner, Sugar Pine, Miles, Memoloose #2 and Stubble field conflagrations.

Revenue: \$216,400 increase to conflagration revenue line item
Expense: \$216,400 increase to Operations Wages & Salaries, Overtime

Fire Department Supplemental Budget #3

The Fire Department is requesting a Supplemental Budget to recognize revenue received following the State Fire Marshal deployment of personnel for the Taylor Creek conflagration.

Revenue: \$46,600 increase to conflagration revenue
Expense: \$46,600 increase to Training Wages & Salaries, Overtime

Police Department

Police Department Supplemental Budget #1

The Police Department is requesting a supplemental budget in the amount of \$7,400 to recognize revenue from the trade-in of outdated cell phones.

In December 2018, the Police Department traded-in outdated cell phones to Verizon Inc., the department's cell phone carrier service. The City's Verizon account was credited \$7,400 for the value of these obsolete phones, and that amount was posted to revenue. The Police Department is requesting to recognize this unbudgeted and unanticipated revenue and appropriate it to the Communications expense account.



CITY OF MEDFORD AGENDA ITEM COMMENTARY

Item No: 40.1

www.cityofmedford.org

Revenue: \$7,400 increase to OFS – Property
Expense: \$7,400 increase to Administrative Support Communications

Police Department Supplemental Budget #2

The Police Department is requesting a supplemental budget in the amount of \$1,800 to recognize revenue received from the High Intensity Drug Trafficking Area (HIDTA).

On October 5, 2018, the federal Office of National Drug Control Police (ONDCP) awarded the Oregon-Idaho High Intensity Drug Trafficking Area a 2018 discretionary award package to strengthen the HIDTA program infrastructure. The City has received authorization from HIDTA to expend \$1,800 of these new funds to purchase a remote tracker to aid in criminal and illegal narcotic investigations. This additional HIDTA funding is above the \$125,000 2018 HIDTA award previously recognized and appropriated.

Revenue: \$1,800 increase to Fed LLEBG/JAG/Byrne
Expense: \$1,800 increase to JL Project M&S

Municipal Court

Municipal Court is requesting an appropriation transfer of \$33,900 for the purpose of funding three unanticipated employee retirements.

Due to retirements in the current biennium, the Finance Department has the capacity to transfer the full amount needed to Municipal Court to avoid transferring it from Contingency.

Transferred From:
\$33,900 decrease to Finance – Salaries & Wages

Transferred To:
\$20,000 increase to Leave Sellback
\$5,800 increase to HRS VEBA
\$4,700 increase to PERS OPSRP Retirement
\$1,500 increase to IAP Contribution
\$1,900 increase to Social Security

Fleet Maintenance Fund (540):

Public Works Department

The Public Works Department, Operations Division, is requesting a supplemental budget to recognize revenues in the amount of \$400,000 that have been received over budget in order to offset expense accounts relating to fleet maintenance.

Revenue:
\$400,000 overall increase to Fund 540 applied to the following line items:
\$20,000 increase to Garage Services - Fixed
\$25,000 increase to the Garage Services - MWC
\$80,000 increase to the Garage Services - Outside Agent
\$267,000 increase to the Inventory Mark Up



CITY OF MEDFORD AGENDA ITEM COMMENTARY

Item No: 40.1

www.cityofmedford.org

\$8,000 increase to the Interest Income

Expenses:

\$400,000 overall increase to expenses in Fund 540 applied to the following line items:

\$20,000 increase to the Operating Tools & Materials

\$40,000 increase to the Professional Contract Services

\$60,000 increase to the Vehicle Maintenance

\$60,000 increase to the Town of Fort Jones Fleet

\$100,000 increase to the JC Fire District #5 Fleet

\$120,000 increase to the Fleet Inventory Clearing

FINANCIAL AND/OR RESOURCE CONSIDERATIONS

The proposed resolution will increase appropriations as follows:

Fund	Existing Appropriations	New Appropriations
100	\$ 370,800	\$ 465,000
540		400,000
	\$ 370,800	\$ 865,000

TIMING ISSUES

None

COUNCIL OPTIONS

Approve the resolution as presented.

Modify the resolution as presented.

Deny the resolution as presented and provide staff with direction.

STAFF RECOMMENDATION

Staff recommends approval of the resolution

SUGGESTED MOTION

I move to approve the resolution as outlined in the attached exhibit.

EXHIBITS

Resolution

Supplemental Budget Request

RESOLUTION NO. 2019-19

A RESOLUTION adopting a seventh Supplemental Budget for the 2017-19 biennium.

WHEREAS, a supplemental budget is required to change appropriations in certain circumstances under ORS 294.471; and

WHEREAS, a public hearing was held by the City on March 21, 2019, after proper notice thereof was given to the public; now, therefore,

BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF MEDFORD, OREGON:

SECTION 1. The City Council hereby adopts a seventh Supplemental Budget for the 2017-19 biennium.

SECTION 2. The City Council hereby makes the new appropriations and transfers of appropriations for the 2017-19 biennium in the amounts and for the purposes shown on the Supplemental Budget Adjustment form which is attached hereto as Exhibit A and incorporated herein by reference.

PASSED by the Council and signed by me in authentication of its passage this _____ day of _____, 2019.

ATTEST: _____
City Recorder

Mayor

CITY OF MEDFORD

SUPPLEMENTAL BUDGET REQUEST PER ORS 294.471

Requesting Department: Finance

Biennium **BN2017-19**

Date of Proposed Council Action: March 21, 2019

Date **March 6, 2019**

Explanation of Requested Transfer: See AIC

Account Number	Description	Project Number	Debit	Credit
Parks, Rec., & Facilities	Vehicle Accident Reimbursement			
100 0000 - 471 0103	Damage Claims			9,500
100 5130 - 640 4004	Park Maint./Motive Equip.		9,500	
Parks, Rec., & Facilities	MWC Reimbursement			
1001590 6909099	Contingency		10,800	
1000000 4411010	General Fund MWC Reimbursements			10,800
Facilities	Second Floor Remodel			
100 1980 - 650 5100	Facilities Projects	BCH0003100	90,000	
100 1310 - 610 1001	Legal Salaries & Wages			45,000
100 1510 - 610 1001	Finance Salaries & Wages			45,000
Parks, Rec., & Facilities	Lausmann Annex Repairs			
100 1980 - 650 5100	Facilities Management CIP	BAN0003100 5100	199,700	
100 1980 - 650 5100	Facilities Management CIP	BAN0004100 5100	47,200	
100 1590 - 690 9099	Contingency			246,900
Fire Department	Conflagration Reimbursement #1			
100 0000 - 431 0201	Revenue - Conflagration			172,500
100 2220 - 610 1002	Ops - Wages, Overtime		172,500	
Fire Department	Conflagration Reimbursement #2			
100 0000 - 431 0201	Revenue - Conflagration			216,400
100 2220 - 610 1002	Ops - Wages, Overtime		216,400	
Fire Department	Conflagration Reimbursement #3			

Account Number	Description	Project Number	Debit	Credit
100 0000 - 431 0201	Revenue - Conflagration			46,600
100 2222 - 610 1002	Training - Wages, Overtime		46,600	
Police Department	Cell Phone Sales			
100 0000 - 471 0202	OFS - Property			7,400
100 2111 - 630 2475	Communications		7,400	
Police Department	HIDTA Award			
100 0000 - 431 0105	Fed LLEBG/Jag/Byrne	PFM0087100-4105		1,800
100 2122 - 630 2214	JL Project M&S	PFM0087100-2432	1,800	
Municipal Court	Retirement Costs			
100 1610 - 610 1007	Leave Sellback		20,000	
100 1610 - 620 2004	HRA VEBA		5,800	
100 1610 - 620 2020	PERS OPSRP Retirement		4,700	
100 1610 - 620 2021	IAP Contribution		1,500	
100 1610 - 620 2030	Social Security		1,900	
100 1510 - 610 1001	Finance Salaries & Wages			33,900
Public Works	Additional Fleet Revenues			
540 0000 - 441 3022	Garage Services - Fixed			20,000
540 0000 - 441 3024	Garage Services - MWC			25,000
540 0000 - 441 3025	Garage - Outside Agent			80,000
540 0000 - 441 3030	Inventory Mark Up			267,000
540 0000 - 461 0101	Interest Income			8,000
540 3124 - 630 2430	Operating Tools & Materials		20,000	
540 3124 - 630 2101	Professional Contract Svcs		40,000	
540 3124 - 630 2510	Vehicle Maintenance		60,000	
540 3124 - 630 2623	Town of Fort Jones CA Fleet		60,000	
540 3124 - 630 2643	JC Fire District #5 Fleet		100,000	
540 3124 - 690 9003	Fleet Inventory Clearing		120,000	

Account Number	Description	Project Number	Debit	Credit
TOTALS			1,235,800	1,235,800

Ryan Martin
Chief Financial Officer

Approved by

[Signature]
City Manager



CITY OF MEDFORD AGENDA ITEM COMMENTARY

Item No: 60.1

www.ci.medford.or.us

DEPARTMENT: Public Works
PHONE: (541) 774-2100
STAFF CONTACT: Cory Crebbin, Public Works Director

AGENDA SECTION: Consent Calendar
MEETING DATE: March 21, 2019

COUNCIL BILL 2019-20

An ordinance awarding a contract in an amount of \$176,455.24 to Blackline, Inc. to perform slurry seal on various city streets.

SUMMARY AND BACKGROUND

The City Council is requested to consider awarding a contract in the amount of \$176,455.24 to Blackline Inc. to perform Slurry Seal on various streets in the City of Medford. A large portion of pavement maintenance is contracted because the City does not have the specialized equipment or expertise to perform this work.

The City of Medford pavement management strategy shows that timely maintenance of streets decreases long-term costs by postponing the need for more costly reconstructions and produces a smoother ride for the traveling public. Slurry Seal is a cost-effective option for preserving the structural integrity of a sound street section.

PREVIOUS COUNCIL ACTIONS

On March 15, 2018, Council approved Council Bill 2018-27 awarding a contract with California Pavement Maintenance Co Inc. for 128,622.7 square yards of Slurry Seal that was installed during the period of May through June 2018.

On June 15, 2017, Council approved Council Bill 2017-57 adopting the 2017-19 biennial budget which includes this project on page 8-34.

ANALYSIS

Six bids were received, and Blackline Inc. was the apparent low bidder with a bid of \$176,455.24. The other five bids which were submitted were: Intermountain Slurry Seal - \$222,202.00, VSS International Inc. - \$246,000.00, California Maintenance Co. Inc. - \$193,730.25, Pave Northwest - \$210,863.13 and Telfer Highway Technologies LLC – \$219,603.92.

This project will be located on 33 street sections within the City of Medford and will total approximately 113,026.3 square yards of a Type II latex modified slurry. The existing pavement condition has been analyzed and it has been determined that this maintenance action will preserve the existing pavement and produce a smoother and safer ride for the traveling public at the lowest life-cycle cost.

A Slurry Seal is a mixture of water, asphalt emulsion, small crushed rock and additives (e.g. latex). Streets chosen to be treated with a Slurry Seal generally have low to moderate pavement distress and narrow cracks. Application of slurry seals the pavement and restores lost flexibility to the pavement surface, helping to preserve the underlying pavement structure.

FINANCIAL AND/OR RESOURCE CONSIDERATIONS

Expenditure of \$176,455.24, which is included on page 8-34 of the 2017-2019 adopted biennial budget. This contract will be paid for with the Street Utility Fund.

TIMING ISSUES

The work will start after May 13, 2019, and is scheduled to be complete by the end of June 2019.



CITY OF MEDFORD AGENDA ITEM COMMENTARY

Item No: 60.1

www.ci.medford.or.us

COUNCIL OPTIONS

- Approve the ordinance as presented.
- Modify the ordinance.
- Deny the ordinance and provide direction to staff regarding pavement maintenance.

STAFF RECOMMENDATION

Approve the ordinance for a contract with Blackline Inc.

SUGGESTED MOTION

I move to approve the ordinance for a contract in the amount of \$176,455.24 to Blackline Inc. for Slurry Seal.

EXHIBITS

Ordinance

Bid Tabulation

Schedule of Items

Maps

Work to Be Done

Contract documents are available in the City Recorder's office

ORDINANCE NO. 2019-20

AN ORDINANCE awarding a contract in an amount of \$176,455.24 to Blackline, Inc. to perform slurry seal on various city streets.

THE CITY OF MEDFORD ORDAINS AS FOLLOWS:

That a contract in the amount of \$176,455.24 for slurry seal on various city streets, which is on file in the City Recorder's office, is hereby awarded to Blackline, Inc.

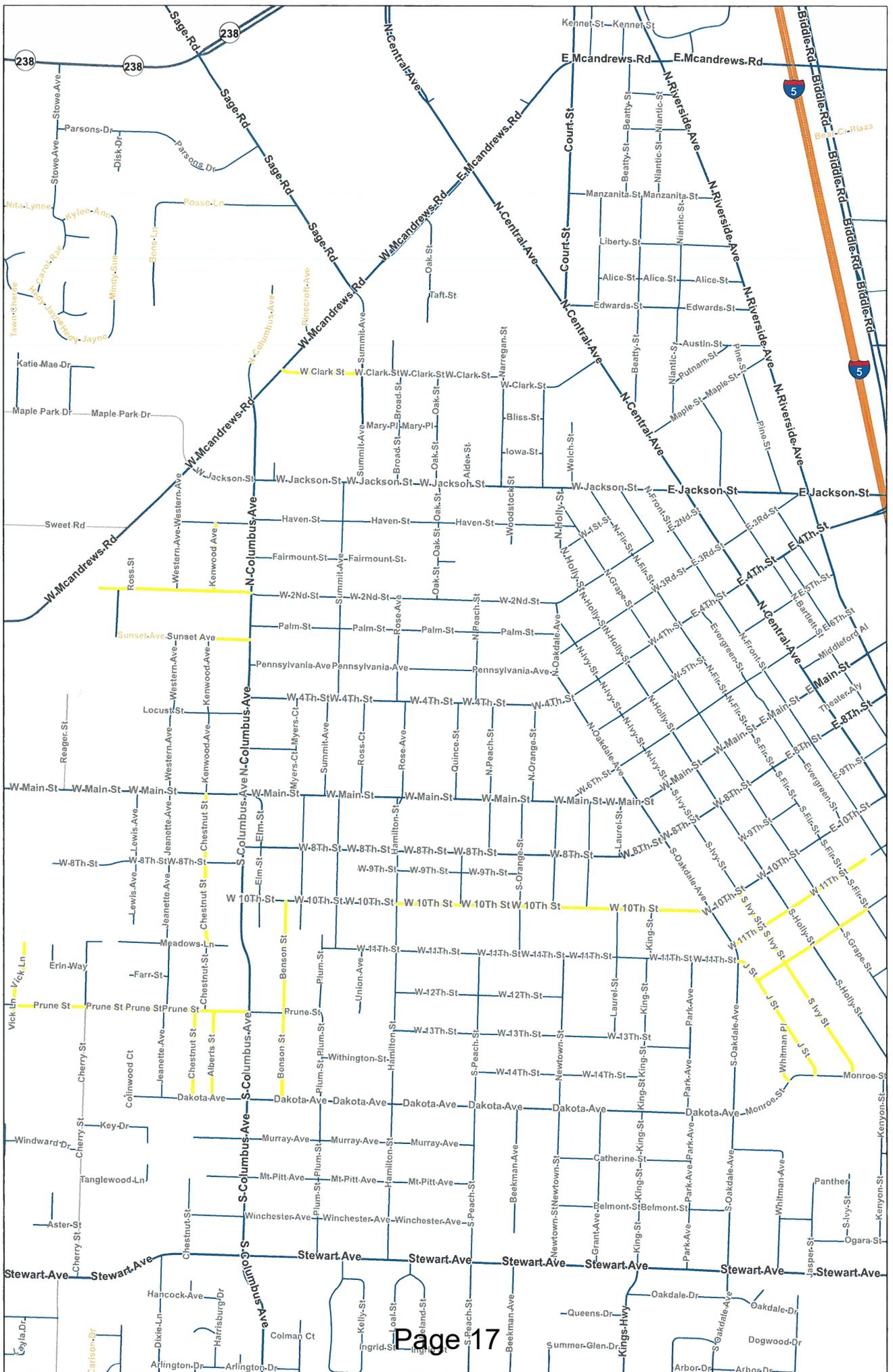
PASSED by the Council and signed by me in authentication of its passage this _____ day of _____, 2019.

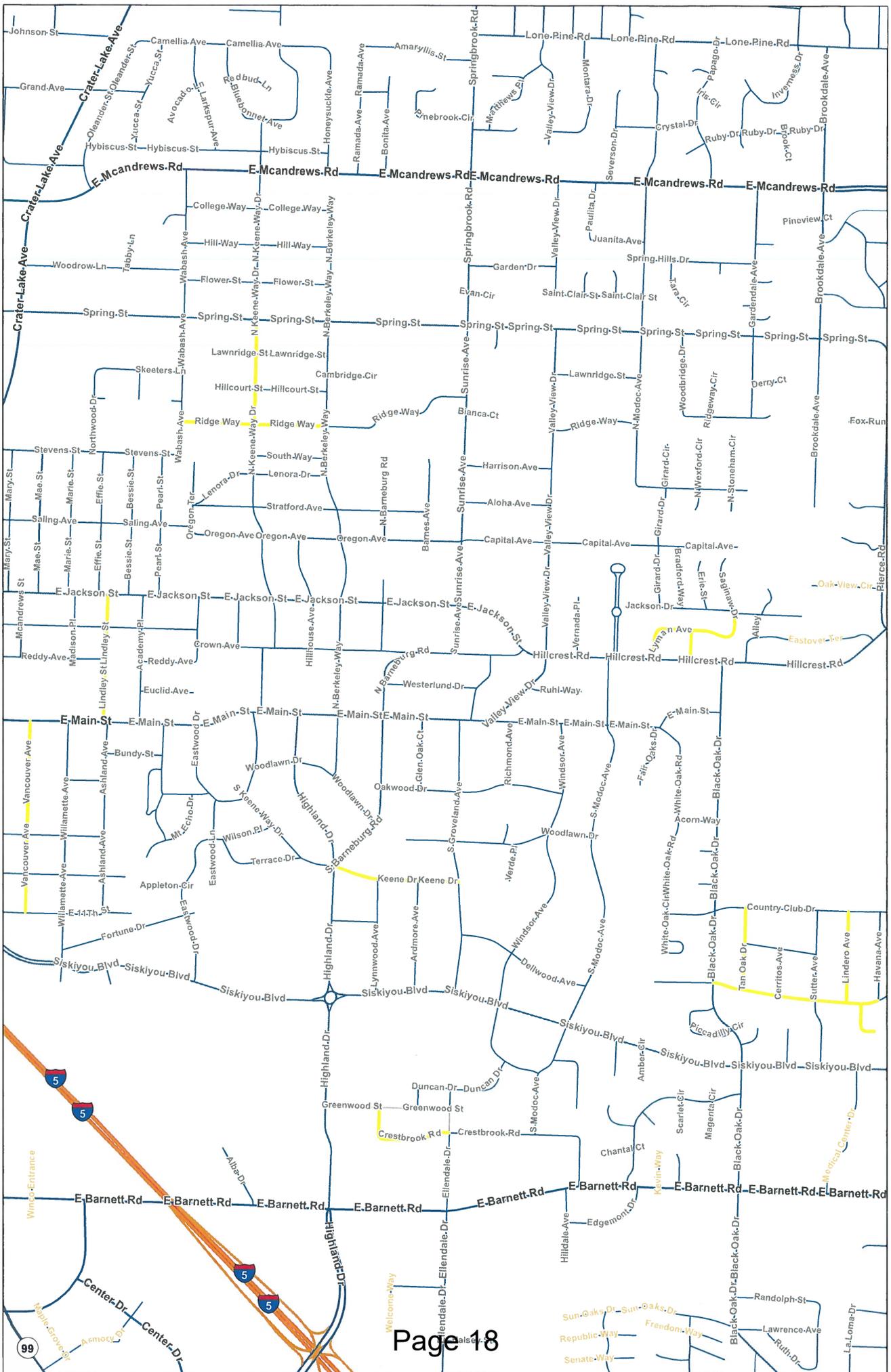
ATTEST: _____
City Recorder

Mayor

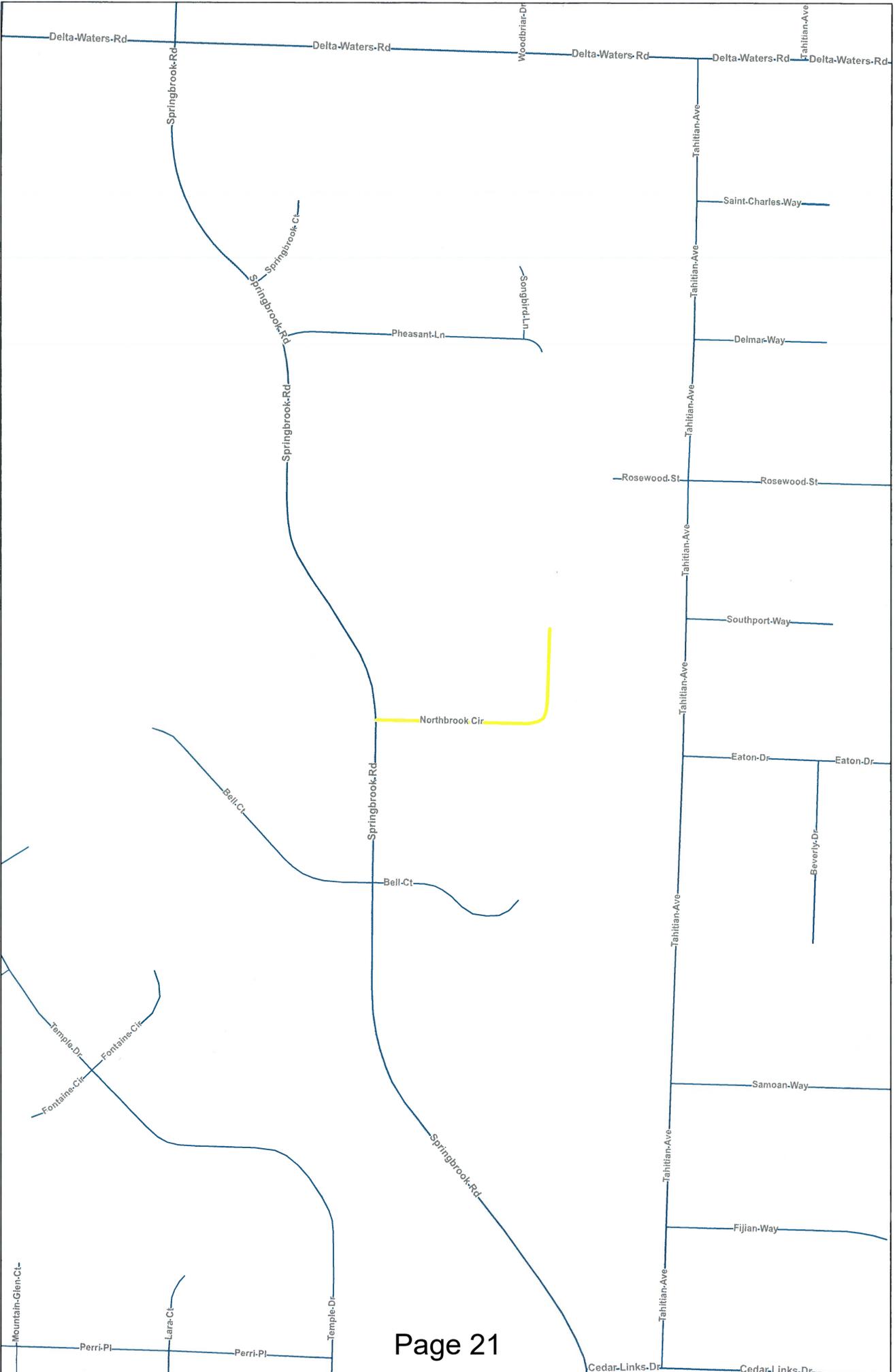
APPROVED _____, 2019.

Mayor









SPECIAL PROVISIONS

WORK TO BE DONE

The Work to be done under this Contract consists of the following all materials, labor, and equipment necessary to place a Type II latex modified Slurry Seal as specified; on thirty three (33) residential street sections in the City of Medford, to total approximately 113,026.3 S.Y.

1. Remove vegetation from cracks
2. Sweep Street prior to Slurry Seal
3. Install Type II Latex Modified Slurry Seal
4. Perform additional and incidental Work as called for by the Specifications.

This project includes work at the following locations:

Slurry Seal 2019

	Street Name	From Street	To Street	SY
1	W 2nd ST	WEST END	N COLUMBUS AV	2,383.3
2	W 10TH ST	HAMILTON ST	OAKDALE AVE	8,431.1
3	W 11TH ST	S OAKDALE AVE	EAST END RR Tracks	3,995.6
4	W 12TH ST	J ST	S FIR ST	3,685.0
5	ALBERTS ST	PRUNE ST	DAKOTA AVE	2,041.7
6	BENSON ST	DAKOTA AV	W 10th ST	6,097.7
7	CERRITOS AVE	DELLWOOD AV	SANDY TERR	1,430.0
8	CHESTNUT ST	W MAIN ST	MEADOWS LN	4,125.0
9	CHESTNUT ST	PRUNE ST	DAKOTA AVE	2,041.7
10	CLARK ST	MCANDREWS RD	SUMMIT AV	2,835.6
11	CRESTBROOK RD	GREENWOOD ST	ELLENDALE DR	3,336.7
12	DE BARR AVE	HOWARD AVE	MERRIMAN RD	6,159.0
13	DELLWOOD AV	BLACK OAK DR	HAVANA AV	5,657.7
14	S IVY ST	MONROE ST	W 10TH ST	6,183.3
15	J ST	S OAKDALE AVE	MONROE ST	4,583.3
16	KEENE DR	HIGHLAND DR	S GROVELAND AVE	2,951.7
17	N KEENE WAY DR	SPRING ST	RIDGE WAY	3,483.3
18	KENWOOD AVE	HUMPHREY ST	W 2nd AV	1,998.3
19	LINDERO AV	DELLWOOD AV	COUNTRY CLUB DR	3,025.0
20	LINDLEY ST	E JACKSON ST	E MAIN ST	3,771.1
21	LONE OAK DR	CHERRY LN	FLDDBROOK AVE	2,870.0
22	LYMAN AV	HILLCREST RD	JACKSON DR	3,093.0
23	NORTHBROOK CIR	SPRINGBROOK RD	Cul-de-sac	1,823.9
24	PRUNE ST	VICK LN	COLUMBUS AV	5,725.0
25	RIDGE WAY	N BERKELEY WAY	WABASH AVE	4,858.3
26	SILVERADO CIR	DELLWOOD AV	COUNTRY CLUB DR	1,873.6

27	SCHEFFEL AVE	LYMAN AV	HILLCREST RD	810.0
28	SUNSET AVE	WESTERN AVE	N COLUMBUS AV	2,383.3
29	TAN OAK DR	DELLWOOD AV	COUNTRY CLUB DR	2,676.7
30	VANCOUVER AV	E 11TH ST	E MAIN ST	4,551.4
31	VICK LN	PRUNE ST	SOUTH END	388.9
32	VICK LN	PRUNE ST	Cul-de-sac	1,784.4
33	WHITMAN PL	MONROE ST	J ST	1,971.7
				113,026.3

APPLICABLE SPECIFICATIONS

The Specification that is applicable to the Work on this Project is the 2008 edition of the "Oregon Standard Specifications for Construction".

All number references in these Special Provisions shall be understood to refer to the Sections and subsections of the Standard Specifications and Supplemental Specifications bearing like numbers and to Sections and subsections contained in these Special Provisions in their entirety.

CLASS OF PROJECT

This is a City of Medford Project

APPLICABLE SPECIAL PROVISIONS

The Special Provisions booklet applicable to the above-described work, for which Bids will be opened at the time and place stated above, is that which contains the exact information as shown above on this page.

Bidders are cautioned against basing their Bids on a booklet bearing any different description, date(s), class of project, or class of work.



CITY OF MEDFORD AGENDA ITEM COMMENTARY

Item No: 60.2

www.ci.medford.or.us

DEPARTMENT: Public Works
PHONE: (541) 774-2100
STAFF CONTACT: Cory Crebbin, Public Works Director

AGENDA SECTION: Consent Calendar
MEETING DATE: March 21, 2019

COUNCIL BILL 2019-21

An ordinance authorizing execution for an Intergovernmental Agreement with Oregon Department of Transportation for a grant for Safe Routes to Schools (SRTS) projects.

SUMMARY AND BACKGROUND

The City Council is requested to authorize an Intergovernmental Agreement (IGA) with the Oregon Department of Transportation (ODOT) for a grant for Safe Routes to Schools (SRTS) projects. The total cost of the projects being funded by this grant is estimated to be \$260,000. ODOT will reimburse the City 80% of eligible costs up to \$208,000. The remaining 20% of the cost plus any costs over \$260,000 will be the City's responsibility.

PREVIOUS COUNCIL ACTIONS

On August 5, 2004, Council approved Council Bill 2004-165 submitting to the voters the question of authorizing \$4,600,000 of general obligation bonds for sidewalk construction in elementary school attendance areas. Councils have approved several phases of the safe sidewalks for schools bond projects in the years since. This shows Medford's early, and fundamental, support of safe routes to schools. The bond money has now been spent.

On November 15, 2018, Council approved Council Bill 2018-126, adopting the Transportation System Plan (TSP) which included Project "Pr1" in the Tier 1 project list, with an annual estimate of \$250,000 for sidewalk infill, "with a focus on high-priority areas including schools...".

ANALYSIS

This SRTS grant will augment the funding identified in the TSP for sidewalk infill and help to provide elementary and middle school students in Medford with safe and convenient walking routes to and from school. These projects are proposed to be included in the fiscal year 2020-21 budget, with the local match coming from gas tax as part of Project "Pr1" identified in the TSP.

The IGA covers three (3) projects:

1. Construction of sidewalks and curb ramps on Morrow Road & Velia Street near their intersection;
2. Construction of sidewalks and curb ramps on W 13th Street between Laurel Street and King Street, and on W 14th Street from Newtown Street to approximately 50 feet west;
3. Construction of sidewalks, curb ramps, a rectangular rapid flashing beacon, and crosswalk enhancements at the Columbus Avenue & Prune Street intersection.

The first project will benefit students who traverse muddy front yards on their way to Wilson Elementary School from the Poplar Drive & Morrow Road area. The second project will benefit students who walk to Washington Elementary School. The third project will benefit McLoughlin Middle School students by providing a safer crossing of Columbus Avenue. The school district identified the area west of Columbus Avenue as one of the higher bus exception areas for McLoughlin. All of these schools are Title 1 schools, meaning at least 40% of students receive free or reduced price lunch. The project at the intersection of Columbus Avenue & Prune Street will also benefit the neighborhood at large as the crash history shows six (6) pedestrian-involved crashes occurring between 2014 and 2017.

Public Works identified these projects through a robust engagement with the school district. Five (5) projects were submitted in the grant application, but ODOT did not fund the full list of projects due to the



CITY OF MEDFORD AGENDA ITEM COMMENTARY

Item No: 60.2

www.ci.medford.or.us

overwhelming need in the state. ODOT received \$85 million worth of requests and had \$16 million of available funding for the SRTS program this cycle.

FINANCIAL AND/OR RESOURCE CONSIDERATIONS

\$52,000 local match from the State Gas Tax Fund is proposed to be included in the fiscal year 2020-21 budget.

TIMING ISSUES

ODOT will not reimburse any project expenses until the IGA is completed. However, since the projects are not included in the current budget, no billable (reimbursable) work can be completed until the new budget is in effect.

COUNCIL OPTIONS

Approve the ordinance as presented.
Modify the ordinance as presented.
Deny the ordinance and provide direction to staff.

STAFF RECOMMENDATION

Staff recommends approval of the ordinance.

SUGGESTED MOTION

I move to approve the ordinance authorizing the IGA with ODOT for a grant for Safe Routes to Schools projects estimated at \$260,000.

EXHIBITS

Ordinance
Maps
Agreement on file in the City Recorder's Office

ORDINANCE NO. 2019-21

AN ORDINANCE authorizing execution of an Intergovernmental Agreement with Oregon Department of Transportation for a grant for Safe Routes to Schools (SRTS) projects.

THE CITY OF MEDFORD ORDAINS AS FOLLOWS:

That execution of an Intergovernmental Agreement with the Oregon Department of Transportation for a grant for Safe Routes to Schools (SRTS) projects, which is on file in the City Recorder's office, is hereby authorized.

PASSED by the Council and signed by me in authentication of its passage this _____ day of _____, 2019.

ATTEST: _____
City Recorder

Mayor

APPROVED _____, 2019.

Mayor



WILSON ELEMENTARY SCHOOL



WEST 13TH STREET

WEST 14TH STREET

WASHINGTON
ELEMENTARY
SCHOOL
(1 BLOCK WEST)

DAKOTA AVENUE

NEWTOWN STREET

NEWTOWN STREET

KING STREET



McLOUGHLIN
MIDDLE
SCHOOL
(3/4 MILE NE)

WASHINGTON
ELEMENTARY
SCHOOL



CITY OF MEDFORD AGENDA ITEM COMMENTARY

Item No: 60.3

www.ci.medford.or.us

DEPARTMENT: City Attorney's Office
PHONE: 774-2000
STAFF CONTACT: Lori Cooper, City Attorney

AGENDA SECTION: Consent Calendar
MEETING DATE: March 21, 2019

COUNCIL BILL 2019-22

An ordinance granting to ExteNet Systems, Inc., the non-exclusive privilege (Franchise) to use the public way to locate, construct, operate and maintain Facilities within the City of Medford.

SUMMARY AND BACKGROUND

Council is requested to consider an ordinance authorizing a franchise agreement between the City of Medford and ExteNet Systems granting the non-exclusive privilege to use the public right-of-way to construct and maintain small cell communication facilities within the City of Medford.

PREVIOUS COUNCIL ACTIONS

None. This is a request from a company that has not previously had a franchise agreement with the City.

ANALYSIS

Small cell communication facilities is an umbrella term for low-powered radio access nodes designed to complement the larger, traditional wireless cell networks. Small cells have shorter range antennas and generally use smaller equipment than traditional macro cell sites. Small cells are deployed by wireless companies where there is a specifically identified need based on monitored subscriber usage (e.g., dropped calls and data failures).

All wireless equipment installed in the right of way, including small cells, are to be placed on existing or replacement poles, as regulated by the standards provided for in Medford Municipal Code (MMC) 10.824(G). In addition to the Franchise Agreement, wireless providers must gain permission from the pole owner(s) prior to attaching equipment to the pole. Applicants wishing to place small cells on City-owned poles will be required to obtain an encroachment license and pay fees for the use of City infrastructure

FINANCIAL AND/OR RESOURCE CONSIDERATIONS

Pursuant to a 2018 Federal Communications Commission (FCC) order, the franchise fees which local government can assess on the types of are limited to \$500 for non-recurring fees, including a single up-front application that includes up to five small cell wireless facilities, with an additional \$100 for each small cell wireless facility beyond five, and \$1,000 for non-recurring fees for a new pole (i.e., not a collocation) intended to support one or more small wireless facilities; and \$270 per small wireless facility per year for all recurring fees including a right-of-way access fee and a fee for attachment to municipally-owned structures in the right-of-way.

TIMING ISSUES

None.

COUNCIL OPTIONS

Approve the ordinance as presented.
Modify the ordinance.
Deny the ordinance and provide direction to staff.

STAFF RECOMMENDATION

Staff recommends approval of the ordinance.

SUGGESTED MOTION

I move to approve the ordinance granting a franchise agreement between the City of Medford and ExteNet Systems.

EXHIBITS

Ordinance

ORDINANCE NO. 2019-22

AN ORDINANCE granting to ExteNet Systems, Inc., the non-exclusive privilege (Franchise) to use the public way to locate, construct, operate and maintain Facilities within the City of Medford.

THE CITY OF MEDFORD ORDAINS AS FOLLOWS:

Section 1. As used in this ordinance, the following words and phrases shall mean:

City: The City of Medford, Oregon.

City Manager: The City Manager or his or her designee.

Facilities: All pipelines, conduits, support poles, associated structures, antennae, support mast and mounts, cable equipment, amplifiers, receivers, battery units, equipment cabinets, through bolts, washers, nuts, power supply cabinets, power meters, grounding or bond wires, enclosures, cabinets, battery back-up units, and related equipment owned or solely controlled by Grantee for use by Grantee in providing telecommunications services to the inhabitants and City of Medford.

Grantee: ExteNet Systems, Inc., its successors and assigns.

Public way: Any highway, street, road, alley, public right-of-way or utility easement for public use under control of the City within the corporate limits of the City now existing and as annexed during the term of this Franchise.

Section 2. A reliable source for telecommunications services is in the public interest of the City and its inhabitants. Therefore, subject to the provisions and restrictions of this ordinance and the Code of Medford, the City grants to Grantee the non-exclusive privilege to locate, construct, operate and maintain its Facilities in the public way.

Section 3. Except as provided in this section, Grantee's Facilities shall be installed underground except along those routes existing at the time of enactment of this ordinance or where infeasible and where all other utilities are required to underground as well. Antenna Facilities shall be permitted to be installed above ground to function. Subject to the City Manager's authority to prescribe which public ways will be used and the location within the public way, it shall be lawful for Grantee to make all necessary excavations in any public way for the purpose of locating, constructing, operating and maintaining its Facilities. Grantee's use of the public way and all construction by Grantee shall comply with the standard specifications and special provisions of the City and all other applicable Federal, State and local laws and regulations, and Grantee and the City shall comply with the requirements of the Oregon Utility Notification Law, ORS Chapter 757 (2013), and the related rules and administrative regulations promulgated thereunder in OAR Chapter 952. No work affecting the public way shall be done by the Grantee without first obtaining the permits required by the City, which may include plan submittal and approval before work begins.

Section 4. New plans will be furnished promptly for any additions or modifications. Plans for Facilities already existing on the effective date of this Franchise that Grantee has not already provided to the City under previous agreement or ordinance shall be furnished to City within sixty (60) days after the effective date of this Franchise.

Section 5. Nothing in this Ordinance shall be construed in any way to prevent the City from constructing and maintaining any public improvement in any public way. In its construction and maintenance of public improvements, the City shall endeavor not to obstruct or prevent the free use by Grantee of its Facilities; however, the City's rights shall be paramount, subject to applicable state and federal law.

Section 6. The City shall have the right to require Grantee to change the location of any facility within the public way when the City determines that the public convenience requires such change, and the expense thereof shall be paid by Grantee, provided the City's request is (a) not unreasonable or discriminatory in nature, (b) is consistent with a lawful exercise of the City's police power, and (c) subject to applicable state and federal law.

If the City requires Grantee to relocate its Facilities located within the City, the City will make a reasonable effort to provide Grantee with an alternate location for its facilities within the public way. City shall give Grantee written notice to relocate its Facilities at least 120 days prior to the date established by the City as the deadline for relocation. Within 30 days receipt of such notice, Grantee shall do any necessary field investigation and furnish the City with a plan showing the exact location of all of Grantee's Facilities in the construction area and showing necessary adjustments and reasonable time requirements. Thereafter, the City will furnish Grantee with final improvement plans and a schedule which allows Grantee a reasonable time to complete the relocation of its Facilities.

Should Grantee, due to its negligence, fail to relocate any such Facilities by the date established by the above-referenced final improvement plans and schedule, the City may effect such relocation at its own risk. The work shall be done by a qualified contractor. The reasonable and verifiable expense thereof shall be paid by Grantee. Grantee shall pay the City's charges for such work within 30 days after receipt of City's statement of charges, subject to Grantee's rights to pursue legal and equitable remedies.

Section 7. Should it ever become necessary to permanently or temporarily rearrange, or permanently or temporarily relocate Grantee's Facilities at the request of a private person or business to the City, Grantee shall perform such rearrangement or relocation as expeditiously as possible upon receipt of reasonable written notice from the person or business desiring the temporary change of the Facilities if such notice meets all of the following requirements:

- (a) approved by the City Manager in writing,
- (b) provides all necessary information about the project,
- (c) provides that the costs incurred by Grantee in making the change be borne by the person or business giving said notice,

(d) provides that the person or business giving notice shall indemnify and hold harmless the Grantee and City of and from any and all damages or claims of whatsoever kind or nature caused directly or indirectly from such change of Grantee's Facilities, and

(e) accompanied by a cash deposit or a good and sufficient bond to pay any and all of the Grantee's estimated costs as estimated by Grantee, unless Grantee provides written confirmation that it waives such requirement.

Section 8. Grantee shall at all times maintain all of its Facilities in a good state of repair. Any damage to the public way caused by Grantee shall be promptly repaired by Grantee at no cost to the City. Grantee shall have a local representative available at all times through the local utility coordinating notification center, whether it be the Rogue Basin Utilities Coordinating Council, the Oregon Utility Notification Center, or any such successor authority, to locate Grantee's Facilities for persons who need to excavate in the public way. Should Grantee fail to maintain or repair any such Facilities by the date established by the City, the City may affect such repair at its own risk, and the reasonable and verifiable expense thereof shall be paid by Grantee. Procedures and costs shall be as in Section 6 above.

Proper Maintenance. Grantee shall maintain its Equipment and poles located in City Rights-of-Way and its Attachments in such condition that they shall not constitute a danger to the health, safety, and welfare of the public.

Right of Entry. Grantee and/or its licensees may enter upon City Rights-of-Way and City Facilities to or inspect Equipment or poles from time to time without prior approval of City.

Removal or Replacement of Equipment. Grantee may remove or replace any items of Equipment as reasonably required in connection with the ongoing provision of Services without prior approval of City, so long as any replacement Equipment is substantially the same as that which has been removed with regard to size, weight and physical configuration. Removal of Equipment from any Rights of Way or Attachment shall not constitute termination of this Agreement. Grantee shall be responsible for pole replacement in the event of emergency/accidental knockdown of a pole caused by Grantee and/or its licensees. Grantee will be responsible for replacement of the pole and arm in accordance with Grantor's streetlight standards. Grantor will provide the luminaire which shall be paid for by the Grantee.

Permits. Grantee and/or its licensees shall obtain all permits prior to performing work in the public right-of-way. In the event maintenance or repair activities will disturb or block pedestrian routes, bicycle lanes, or vehicular traffic lanes in City Rights-of-Way, Grantee and/or its licensees shall obtain City approval of traffic control plans and adhere to the specifics of such plans so long as any travel restrictions or hazards remain.

Section 9. Grantee shall indemnify and hold harmless the City from any and all damages of any kind or character to the extent caused by the location, installation, operation and maintenance of

the Grantee's Facilities in the City by Grantee or its contractors, except to the extent caused by the City's or a third party's negligence, recklessness or willful misconduct. Grantee or City shall promptly advise the other in writing of any known claim or demand against Grantee or the City related to or arising out of Grantee's activities in the Public right-of-way.

Grantee shall pay \$500 for non-recurring fees, including a single up-front application that includes up to five Small Wireless Facilities, with an additional \$100 for each Small Wireless Facility beyond five, and \$1,000 for non-recurring fees for a new pole (i.e., not a collocation) intended to support one or more Small Wireless Facilities; and \$270 per Small Wireless Facility per year for all recurring fees including a right-of-way access fee and a fee for attachment to municipally-owned structures in the right-of-way.

Said franchise fee shall not be in addition to any other special license, occupation, franchise or excise taxes or charges which might otherwise be levied or collected by the City from Grantee with respect to Grantee's telecommunications business or the exercise of this franchise within the corporate limits of the City, and the amount due to the City under any other special license, occupation, franchise or excise taxes or other charges for corresponding periods shall be reduced by deducting therefore the amount of said franchise fee paid hereunder. A deductible "special" tax or charge is one that is levied only on Grantee or only on utility companies.

Grantee shall not deduct any general business taxes or general sales taxes levied or collected by the City. Grantee shall not deduct charges and penalties imposed by the City for noncompliance with charter provisions, ordinances, resolutions or permit conditions from the franchise fee payment required by this section. Nothing contained herein shall relieve the Grantee from the requirement to pay a system development charge properly imposed by the City in the appropriate cases consistent with applicable law, and such system development charges shall not reduce the franchise fee. Except as required by the City's moratorium on pavement cuts, Grantee shall not be required to pay any permit fees or similar charges for street opening, installations, construction and the like.

Grantee's payment shall be paid annually on May 1.

With each franchise fee payment, the Grantee shall furnish a statement setting forth the amount and calculation of the payment. The statement shall detail the revenues received by the Grantee from its operations within the City and shall specify the nature and amount of all exclusions and deductions from such revenues claimed by the Grantee in calculating the franchise fee.

Payment not received within thirty (30) days from the due date shall be assessed interest at the rate of one percent (1%) compounded monthly from the due date. Except as otherwise required or allowed by law or rule, no portion of this franchise fee shall be noted separately on any bill to any customer or user of services or commodities furnished by Grantee. The look-back period for overages and underages shall be thirty-six (36) months from the due date of the payment. Subject to the thirty-six (36) month look-back period, no acceptance of any payment shall be construed as an accord that the amount paid is in fact the correct amount, nor shall any acceptance of payments be construed as a release of any claim the City may have for further or additional sums payable. Subject to the thirty-six (36) month look-back period, all amounts paid shall be subject to confirmation and re-computation

by the City.

Section 11. Payment of this franchise fee shall not exempt Grantee from the payment of any other license fee, tax or charge on the business, occupation, property or income of Grantees that may be imposed by the City, except as may otherwise be provided in the ordinance or ordinances imposing such other license fee, tax or charge, and subject to applicable state and federal law.

Section 12. This Franchise shall continue and be in force until midnight March 21, 2029. This Franchise may be terminated at any time upon forty five (45) days written notice for failure to pay the fee pursuant to Section 10 of this ordinance or comply with other material provisions of this agreement or the Code of Medford unless such failure is remedied within the forty five (45) day period. Otherwise, this agreement shall remain in effect.

Section 13. This Franchise is not transferable. Nothing herein shall be interpreted to limit Grantee's rights to use contractors, nor its right or responsibility, as applicable, to allow other entities to use portions of its telecommunication system; in such instances, neither notice to nor consent from the City shall be required.

Notwithstanding anything to the contrary within the terms of this Franchise, Grantee shall have the right to assign its rights and interest under the Franchise to its subsidiaries, affiliates or successor legal entities or to the subsidiaries or affiliates of Grantee without notice or consent.

Section 14. The City Manager is authorized to act for the City in all matters pertaining to this Franchise. Grantee may appeal any action of the City Manager to the City Council by giving written notice thereof within twenty-one (21) days after Grantee was notified of such action. The City Council will hear the appeal and render a final decision within thirty (30) days after the notice of appeal is given.

Section 15. Whenever any notice is to be given pursuant to this ordinance, it shall be effective on the date it is sent in writing by registered or certified mail, addressed as follows:

To the City: City Manager
Medford City Hall
411 West 8th Street
Medford, OR 97501

To Grantee: ExteNet Systems, Inc.
3030 Warrenville Road, Suite 340
Lisle, Illinois 60532
Attn: CFO

With copy to General Counsel at same address.

Notice of change of address may be given in the same manner as any other notice.

Page 5 of 6

Section 16. This franchise supersedes all prior franchises between City and Grantee.

Section 17. Proprietary information as identified and provided by the Grantee to the City under this Ordinance is entitled to protection as trade secrets and shall be governed by confidentiality procedures pursuant to ORS 192.501, ORS 192.502 and under any other applicable State or Federal laws.

Section 18. This ordinance shall be governed by Oregon law. Nothing in this Ordinance is intended to be inconsistent with the State or Federal Law and further neither the City nor Grantee waives any rights granted under State or Federal Law by agreeing to this Ordinance. If any clause, sentence, or section of this Ordinance, or any portion thereof, shall be held to be invalid by a court of competent jurisdiction, such decision shall not affect the validity of the remainder, as a whole or any part thereof, other than the part declared invalid.

PASSED by the Council and signed by me in authentication of its passage this _____ day of _____, 2019.

ATTEST: _____
City Recorder

Mayor

APPROVED: _____, 2019.

Mayor

FOR GRANTEE (EXTENET):

By: 
Richard J. Coyle, Jr

Title: EVP-COO

Date: 02/26/19



CITY OF MEDFORD AGENDA ITEM COMMENTARY

Item No: 100.1

www.ci.medford.or.us

DEPARTMENT: City Manager
PHONE: (541) 774-2000
STAFF CONTACT: Brian Sjothun, City Manager

AGENDA SECTION: City Manager's Report
MEETING DATE: March 21, 2019

SUMMARY AND BACKGROUND

Staff is seeking Council approval of the 2019 Federal Legislative Agenda. The proposed agenda was developed through staff and Council comments to City's contracted lobbyist at CFM Strategic Communications. Historically, the Council has approved the legislative agenda prior to Council and staff traveling to Washington DC to present the agenda to the appropriate agencies along with our elected federal representatives and senators.

PREVIOUS COUNCIL ACTIONS

Council has not previously voted to formally adopt the past Federal Legislative Agenda. This item has been discussed at Council Officers meetings with comments during the normal Council meetings.

Staff is seeking a motion to approve the 2019 Federal Legislative Agenda and will follow this process for such review and approval for future agenda's.

ANALYSIS

The proposed 2019 Legislative Agenda was developed through the collaborative efforts of the City Manager's Office, Department Directors, Council and CFM Strategic Communications. The agenda details the grant requests for which the City will be applying for in the future along with current funding requests that are at various stages of the review process.

Grant Requests Highlights:

- South Stage Overcrossing and Foothill Road Mega Corridor - \$25,000,000. Staff will be submitting a BUILD Grant for this project once the notice of funding is announced.
- Downtown "Livability Team" - \$375,000. Funding through the COPS Grant program is currently held up in Federal court. Once the funds are released, staff will be submitting this grant request. There is no current time table of when these funds are expected to be available.
- Fire Department Mobile Air Compressor - \$119,978. Current application that is under review and if funded would replace our 29-year-old Self Contained Breathing Apparatus Air Compressor.
- Bear Creek Restoration Project - \$52,746. Grant application in partnership with the Rogue Valley Council of Government for restoration work along the Bear Creek Greenway.
- Downtown Reinvestment - \$500,000. Seeking funds through FEMA in order to leverage the \$1.9 million in funds provided by Medford Urban Renewal Agency for seismic work.
- Wildfire Protection. There is no specific other than to seek guidance on possible funding to prepare a Community Wildfire Protection Plan.

Policy Agenda Highlights:

- Accessible Housing and Homelessness. Awareness on the City's efforts through the Continuum of Care and Jackson County Homeless Taskforce to address issues surrounding homelessness.
- Forest Management Reform and Wildfire Relief. Support of further reform to federal policies with additional funding to enable more active forest management.



CITY OF MEDFORD AGENDA ITEM COMMENTARY

Item No: 100.1

www.ci.medford.or.us

- Investment Package – Infrastructure Spending. Support for a robust federal infrastructure package that will address the growing backlog of projects in our region.
- Increase HIDTA Funding – Continue support for funds through this program to assist with the Medford Area Drug Gang Enforcement Team.
- FY 2020 Program Appropriation Levels. City supports increased funding levels for federal programs that provide vital assistance to our community.
- Banking Access for Legal Cannabis Business. Support the passage of legislation, such as the Secure and Fair Enforcement Banking Act, by ensuring legal cannabis businesses have access to basic banking services.
- Federal Energy and Climate Action Plan. Support federal efforts to partner with local governments in support of local action on climate change mitigation.

FINANCIAL AND/OR RESOURCE CONSIDERATIONS

The City will be seeking grant funds totaling \$26,347,724 through the projects and programs presented in the legislative agenda.

TIMING ISSUES

Council Officers are set to travel to Washington DC to meet with various departments along with Senator's Wyden, Walden and Representative Walden on April 1-4 to present and discuss the legislative agenda.

COUNCIL OPTIONS

Approve the 2019 Legislative Agenda as presented
Modify and approve the 2019 Legislative Agenda
Deny the 2019 Legislative Agenda and provide staff direction

STAFF RECOMMENDATION

Staff recommends either approval of the 2019 Legislative Agenda as presented or to modify and approve the agenda at the March 21, 2019 Council meeting.

SUGGESTED MOTION

Based on the discussion and direction provided by Council.

EXHIBITS

2019 Legislative Agenda

CITY OF MEDFORD



2019 LEGISLATIVE AGENDA

GRANT REQUESTS

PROJECT DESCRIPTION

FEDERAL REQUEST

South Stage Overcrossing and Foothill Road Mega Corridor

\$25,000,000

The City of Medford is currently divided by Interstate 5 and Bear Creek with limited connectivity from east to west sides. Existing and planned urban areas are located on the eastside of I-5 while Medford's urban center, planned employment center, employment hubs, the region's largest urban trail system and the Bear Creek Greenway are located on the west side of the Interstate. The City is seeking funding to expand existing infrastructure and plan for a new overcrossing that together will address current and future demands for enhanced connectivity and access to employment.

This existing Foothill Road Corridor extends 11 miles through the center of Medford from neighboring small and rural communities northeast and south of the City, providing a critical connection through residential and commercial areas outside Interstate 5. However, the capacity of the Corridor needs to be expanded to sufficiently accommodate these demands and future residential, commercial, and industrial growth throughout the region.

Furthermore, completion of a new connection across the Interstate – the Stage Road Overcrossing – would connect the east and west sides of Interstate 5 and Bear Creek by providing connection for auto, bicycle and pedestrian travel that does not now exist between the two sides of the Interstate for three miles. The location of this overcrossing will also support future economic growth, provide alternate routes in the case of the Cascadia event and allow for connection of two regional trail networks and the north-south Bear Creek Greenway.

Account: Department of Transportation BUILD Program

Downtown "Livability Team" Police Force

\$375,000

The City of Medford is anxiously awaiting for the Department of Justice's to end its delay of releasing its FY17 and FY18 COPS Hiring grant program funds. Once the grant competition is announced, the City will be seeking funds to establish a new "Livability Team" to address issues associated with the City's homelessness population in its downtown core and assist in the abatement of nuisance properties through the City's Neighborhood Livability Partnership. Three officers and two support staff will be sought for this initiative to improve safety and general livability for all individuals in Medford. The addition of these positions will enhance the capabilities of the Medford Police Department by providing resources needed to curb systemic homelessness issues in Medford, ensure the levels of safety and security that are essential for a healthy downtown core, and adequately address the underlying issues of nuisance properties within the City.

Account: Department of Justice COPS Hiring Program

Fire Department Mobile Air Compressor**\$119,978**

The Medford Fire Department (MFD) has applied for \$119,978 in federal funds to replace a 29-year-old Self Contained Breathing Apparatus (SCBA) Air Compressor with a new compressor that can meet the locational demands of this failing asset and also provide mobile support on site for incident responses. By replacing its oldest and now obsolete compressor, MFD will avoid a 30% decrease in its ability to fill critical SCBA bottles for its firefighters. In its place, the replacement asset will expand refill capacity above current capabilities to avoid unnecessary refill delays that jeopardize the timeliness of the Department's response and the safety of its firefighters. As a result, this asset will ensure that MFD can meet its stated mission to serve the community through risk reduction and all-hazard response to emergencies. In addition to serving stationary refill needs, the new asset would be utilized with partner agencies under Medford's robust mutual aid agreement, providing the only mobile air compressor available throughout the vast 4,444 square miles of Jackson and Josephine Counties.

Account: FEMA Assistance to Firefighters Grants

Bear Creek Restoration Project**\$52,746**

In partnership with local stakeholders and the Rogue Valley Council of Governments, Medford is working to restore needed areas along the Bear Creek Greenway. The Greenway attracts an estimated 146,0000 visitors per year in walkers, hikers and bicyclists and sustains a significant salmon population. Unfortunately, its water quality is ranked as "poor" by the ODEQ and invasive plants threaten habitat quality for these species. Furthermore, dense patches of this invasive vegetation have created significant public safety hazards for visitors along the Greenway.

The City has partnered with RVCOG to submit an application to the Five Star and Urban Waters program for \$52,746, matched with over \$140,000 of local support. Under the proposal submitted by RVCOG, the project would utilize these grant funds and matching investments to provide needed restoration work along Bear Creek within a 50-acre area in Medford and a 20-acre area in the neighboring City of Central Point. The project will facilitate the removal of invasive plants while retaining and planting additional native trees and shrubs to make streamside habitat improvements and discourage illicit activities for enhanced public safety.

Account: EPA Urban Waters; National Fish and Wildlife Foundation Five Star and Urban Waters Restoration Program

Downtown Reinvestment**\$500,000**

The City of Medford is at a turning point with a vision to restore, regenerate and boost the downtown core. The City is working with local partners and directing \$1.9 million in Medford's Urban Renewal funds towards the goal of creating dynamic and positive revitalization to the downtown area. The structures within this district consist of commercial and residential uses that contribute to the health, wealth and beauty of Medford's history. The repurposing of these buildings is essential to keeping the vitality alive downtown. However, most structures downtown are unreinforced, soft-story, older tilt-up concrete or have parapets that would trigger seismic upgrades. Any construction project that exceeds \$100,000 or \$15 per square foot, and/or a Change of Occupancy to higher category occupancy requires a seismic retrofit.

Medford's overall vacancy rate is below 2%, but its downtown vacancy rate is 18.9%, more than nine times the city average. These properties in the Central Business District are clearly underutilized. The City is looking to leverage its own investment to secure federal Pre-Disaster Mitigation grant funds. This funding would be used to help ease the burden of retrofitting the historic buildings downtown and acquire properties where needed to redevelop them for enhanced uses.

Account: FEMA Pre-Disaster Mitigation Grant Program



Wildfire Protection

As a forested community, the threat of wildfire represents a constant threat to the City of Medford each summer. Medford recognizes the devastating impacts these fires have had in similar areas such as the tragic events in Paradise, California and is taking action to enhance local protection for our City. To address these dangers, Medford is seeking funds to prepare a Community Wildfire Protection Plan (CWPP) and implement mitigation measures that will help prevent wildfires from reaching the City and harming residents, homes, infrastructure, and businesses.

Prescott Park Trails Expansion Project

\$300,000

The City is seeking funds to address the recreational deficiency of outdoor, multi-use trails close to the City's urban center by improving access to Prescott Park and development of planned multi-use trails. Prescott Park is located just northeast of Medford and is home to Roxy Ann Peak, an elevated summit standing 2,000 feet above the Rogue River Valley floor. Located within a 15-minute drive for 92.2% of Medford's residents, the Park offers 1,700 acres of City-owned land with panoramic views of the Rogue River Valley, Mt. Shasta, Mt. Ashland, Table Rock, and the City of Medford.

Grant funds would be used to expand the miles of multi-use trails, enhance access to trail heads through road improvements, construct additional trails that will provide essential firebreaks during wildland fires, and develop trails for residents and visitors to the region. This project will enhance outdoor recreation opportunities for nearly the entire total population living in Medford and southern Oregon, as well as visitors to the region.

Account: LWCF Outdoor Recreation Legacy Partnership Program

Medford I-5 Viaduct Corridor Improvements

A major earthquake could wipe out one of Jackson County's most important bridges on Interstate 5 - the 3,222-foot-long viaduct that cuts through the heart of Medford and serves as a critical link in the West Coast's primary north-south transportation corridor. The aging structure, built in 1962, already is an economic engine for the region, and transportation officials expect freight traffic on Interstate 5 to double within five years.

Because of its importance to West Coast traffic and worries about its longevity, the Oregon Department of Transportation is investing \$4 million from the Oregon Transportation Commission to study safety, operational, and structural needs of bridge and surrounding corridor. The viaduct's ability to withstand an earthquake or other major disaster is critical from public safety and economic standpoints.



POLICY AGENDA

Accessible Housing and Homelessness

The City has worked with community partners to form the Jackson County Homeless Task Force to develop cohesive strategies for addressing the extensive homelessness crisis in Medford and Jackson County. Established as the Medford/Ashland/Jackson County Continuum of Care, the City and its local partners receive funds through HUD's Continuum of Care grant program that are critical for achieving this mission. Unfortunately, despite increased efforts by the local community to address this problem and recent, more accurate measures that reflect even higher homeless populations than previously expected, our Continuum of Care has consistently received an allocation of HUD funds far below the level of need in the community. Additional funding for this program is critical, as well as improved funding distribution for communities like Medford and Jackson County that consistently lose funding to larger metropolitan areas.

Forest Management Reform and Wildfire Relief

Due to a lack of proper land management, catastrophic wildfires continue to destroy federal forestlands every summer while local communities suffer significant air quality hazards caused by wildfire smoke. Last summer, air quality in the Rogue Valley was unhealthy for 37 days, forcing many Medford residents to stay indoors for extended weeks on end while visitors avoided the area. As a result, the City suffered from a decrease in quality of life and business, including a \$3 million loss in tourism activity. The City supports further reform of federal policies with additional funding to enable more active forest management that improves the health of our federal forests, mitigates wildfires, and provides long-term economic benefits for the community.

Medford Casino Proposal

The Coquille Indian Tribe applied to have 2.42 acres of land located in Medford acquired in trust for class II gaming. The City has several concerns regarding the proposed project including its loss of regulatory jurisdiction over City land, the impacts a class II casino will have on the City, the potential for future casino expansion at the site and the introduction of class III games, and the economic impacts related to substitution effects and problem gambling and related issues. Before any project moves forward, it must include extensive input from the local community to address these concerns and ensure fair local service agreements with the City.

Investment Package – Infrastructure Spending

President Trump has proposed a ten-year, \$1 trillion investment package to create American jobs and stimulate economic development. The City supports a robust federal infrastructure package that will address the growing transportation, water and housing infrastructure backlog in our community and communities around the country.

Increase HIDTA Funding Within ONDCP

Funding from the High Intensity Drug Trafficking Area (HIDTA) program provides critical support for the success of the Medford Area Drug Gang Enforcement Team (MADGE). MADGE is an interagency drug and gang task force comprised of personnel from the Medford Police Department, Jackson County Sheriff's Office, Oregon State Police, Federal Bureau of Investigation, Jackson County Community Justice and the Jackson County District Attorney's Office. The team focuses on disrupting and dismantling middle to upper level drug trafficking organizations in the county and surrounding region. In addition, the team works with the various law enforcement agencies within the county to address controlled substance activity within neighborhoods through strict enforcement and nuisance abatement laws.



The City supports increasing HIDTA funding and maintaining its administration through ONDCP, rather than a large federal agency such as DOJ that would jeopardize this program's strong record of success through flexible and reliable administration of funds.

FY 2020 Program Appropriation Levels

The City supports increased funding levels for federal programs that provide vital assistance to our community including - HUD Continuum of Care Homeless Assistance, CDBG, HOME Investment Partnerships, BUILD, COPS Hiring, BYRNE Justice Assistance Programs, Economic Development Administration and Assistance to Firefighters funding.

Police Equipment Funding

The City strongly supports funding for police equipment, including restoration of COPS Technology Grants. There are very few funding options at the federal level to help police departments purchase equipment even though federal mandates continue to require costly upgrades. Federal funds for upgrades are important especially for police departments with cash strapped budgets.

EPA Regulatory Concerns and Unfunded Mandates – The City opposes legislative or regulatory initiatives that undermine local government decision making and contributes to reduction in our workforce.

- *Waters of the U.S.:* The City has strong concerns over the potential impacts of the EPA and the U.S. Army Corps of Engineers' previous rule to amend the definition of "waters of the U.S." and expand the range of waters that fall under federal jurisdiction. The City supports the agencies' efforts to postpone implementation of the rule until it can be further reviewed and replaced with an improved measure that protects the environment without excessive regulation.
- *FEMA and Endangered Species:* The National Marine Fisheries Service (NMFS) issued a Biological Opinion that found FEMA must change its implementation of the National Flood Insurance Program to better protect endangered species within floodplains. NMFS's recommendations, as written, would require FEMA to go above and beyond its legal authority, amending and issuing new regulations that would subject communities to excessively restrictive floodplain development standards. Along with other local governments throughout the Pacific Northwest, the City applauds the inclusion of language in the 2018 FAA Reauthorization bill to delay these regulations, and supports a permanent fix to prevent the unnecessary limitations they would place on communities in floodplains like Medford.

Remove Cannabis as a Schedule I Substance

Following the legalization of recreational and medical cannabis in states like Oregon, millions of dollars in new tax revenues have been generated that now provide funding to local police, drug treatment and mental health centers, housing programs, and school programs. While local regulations have been enacted for safe sale and use of cannabis, it remains federally listed as a Schedule I substance under the Controlled Substances Act. As a result, the threat of federal enforcement has caused uncertainty of states and local governments' ability to regulate the manufacturing, distribution and retail sale of cannabis for the safety and health of its residents. Furthermore, the Schedule I classification prohibits cannabis businesses from claiming the same tax exemptions that are afforded to other businesses. This places a disparate tax burden on legal cannabis businesses, impedes regional business and tourism growth, and creates opportunity for a multitude of improper tax filings. We are also concerned about the 2nd Amendment rights of our citizenry being compromised by a schedule I substance that is legal in the State of Oregon. The City of Medford supports the removal of marijuana from the federal government's list of



Schedule I drugs and passage of new legislation that would ensure states and municipalities have the ability to establish their own laws and regulations that safely oversee the industry.

Banking Access for Legal Cannabis Businesses

Cannabis businesses operating under state laws (like those in Oregon) that have legalized medicinal or recreational cannabis have been mostly denied access to the banking system because banks that provide them services can be prosecuted under federal law. Without the ability to access bank accounts, accept credit cards, or write checks, businesses must operate using large amounts of cash. This condition creates safety risks for businesses and local communities, makes it more difficult for local and state governments to collect taxes, and increases the risks of theft crimes and tax evasion. Meanwhile, local economic growth is stifled as non-cannabis business owners that happen to also have vested interests in a cannabis business are disqualified from participation in the SBA loan program and other small business programs, like Business Oregon, that receive federal dollars. The City supports the passage of bipartisan legislation, such as the Secure and Fair Enforcement (SAFE) Banking Act, to address this problem by ensuring legal cannabis businesses have access to basic banking services.

Federal Energy and Climate Action Plan

The most recent National Climate Assessment report released by the administration in 2018 outlined the appearance and visible impacts of climate change in every region and state. In order to meet the carbon emissions reductions goals necessary to mitigate the harmful effects of climate change on communities, improving energy efficiency, increasing energy conservation and deploying renewable energy systems will be essential at the local, state and federal levels. The City of Medford supports the development of Climate and Energy Action Plan policies that will help achieve this goal through support of local partners in place of ineffective unfunded mandates on local municipalities. The City supports federal effort to partner with local governments in support of local action on climate change mitigation, and to provide essential tools, research, technology development, data, and funding, as well as workforce development, job training and community assistance to help transition to a cleaner economy.

Medford Federal Contact:

Kirby Garrett

CFM Strategic Communications

541-480-0938

[*kirbyq@cfmdc.com*](mailto:kirbyq@cfmdc.com)





CITY OF MEDFORD AGENDA ITEM COMMENTARY

Item No: 100.3

www.ci.medford.or.us

DEPARTMENT: City Management
PHONE: 541-774-2009
STAFF CONTACT: Eric Zimmerman, Deputy City Manager

AGENDA SECTION: City Manager's Report
MEETING DATE: March 21, 2019

SUMMARY AND BACKGROUND

Council requested a report on the declaration of an emergency and establishing emergency shelters. This report discusses the considerations and recommendations provided by staff in working as part of an ad hoc committee to respond to the Council request.

PREVIOUS COUNCIL ACTIONS

On January 3, 2019, City Council discussed a citizen request regarding weather emergencies and temporary shelters relative to the memorandum provided by the City Attorney, Exhibit C, addressing multiple options that Council could consider. Some Council members expressed a desire to consider aligning the Medford Municipal Code with the ORS that allows local jurisdictions to allow certain institutions the ability to provide overnight camping spaces for vehicles.

On February 21, 2019, City Council directed staff to report on March 21, 2019 on this topic rather than the May 2019 study session.

ANALYSIS

Severe weather events are a concern for local jurisdictions as it appears more residents are unsheltered and face potential health and safety risks due to exposure to excessively cold or hot temperatures. Many communities allow for short-term emergency shelters to operate during these severe weather events as a means to help unsheltered people get inside to either stay warm or to cool down. This type of shelter often differs from the more commonly known homeless shelters that may be aligned with social services, may establish recovery services, or otherwise operate seasonally or yearly despite the weather. Emergency Shelters are intended to preserve health and to be used only for the duration of a severe weather event.

In Medford:

- A Conditional Use Permit is required to operate a shelter in the City of Medford per Chapter 10 if the Medford Municipal Code.
- A Declaration of an Emergency can be used to suspend the requirement of a CUP or other factors that prevent a shelter from being operating as a response to an emergency situation including a severe weather event.
- The Mayor has the authority to declare an emergency.

Contained within the report, attached as Exhibit A, there are a series of recommendations for council to discuss or consider that would allow the City to take action relative to allowing the operation of emergency shelters. Additionally, there is information related to the weather parameters that could trigger the City to declare a severe weather event and allow emergency shelters.

Summary from Exhibit A:

The CUP currently required of shelters is a barrier to allowing providers to provide short-term shelters during severe weather events. The legal restrictions can be overcome through the use of an emergency declaration or changes to the Medford Municipal Code.

The likelihood of successful emergency shelters is less cut and dry than defining the legal parameters. It requires ongoing coordination and organizing between the City, the faith based community, nonprofit providers, Jackson County, and other interested parties. This memorandum has prepared recommendations and discussion points from a position of allowing emergency shelters to exist in the



CITY OF MEDFORD AGENDA ITEM COMMENTARY

Item No: 100.3

www.ci.medford.or.us

community rather than proposing a city program to operate shelters. This places the city in a convening role to enable community partners to provide a service and therefore more of their buy-in and participation is needed to make such a program successful for the community.

FINANCIAL AND/OR RESOURCE CONSIDERATIONS

The ad hoc committee did not recommend any financial actions at this time but noted that the financial concerns of the providers remain unanswered, particularly in time of extended need or frequent need. The City does not house the local Health and Human Services functions, which is where community providers generally seek reimbursement for shelter services. This is an area for additional investigation.

TIMING ISSUES

Council requested this report by March 21, 2019 as an alternate to a study session in May 2019.

COUNCIL OPTIONS

This item is intended for council discussion. Council can direct staff on any of the contained recommendations or can ask staff to develop additional recommendations to meet the City Council's intent.

STAFF RECOMMENDATION

Council should determine if they want emergency shelters to operate within the city during severe weather events, if this is the desire of the Council, then the staff has provided several recommendations within Exhibit A that can help achieve such an intent.

SUGGESTED MOTION

Based on the discussion and direction provided by Council.

EXHIBITS

- A. Emergency Declaration and Emergency Shelter Report
- B. Medford Temporary Shelter Guidelines and Policies
- C. Proposed draft for new Temporary Shelter Guidelines
- D. Risk/Liability Matrix
- E. EPA Handbook on Extreme Heat Events
- F. CDC Extreme Cold Prevention Guide
- G. Severe Weather Shelter Response Plan - Template
- H. Medford Municipal Code Chapter 10
- I. Medford Municipal Code Chapter 12

Exhibit A

Emergency Declaration and Emergency Shelter Report



City of Medford

Office of the City Manager

Medford ~ A Fantastic Place to Live, Work & Play

To: Mayor and City Council
From: Eric Zimmerman, Deputy City Manager
Date: 3/14/2019
Re: Emergency Declaration and Emergency Shelter Report

On February 21, 2019 the Medford City Council directed staff to develop a report for the council that described the process for 1) declaring an emergency and 2) establishing emergency shelters. The Mayor provided the staff with questions and information requests to help in the decision making process of an emergency declaration. This report is intended to answer those questions, provide limited recommendations, and to provide for further policy discussion by the Medford City Council.

Declaring an Emergency

The Medford Municipal Code (MMC) Chapter 12 describes the intent and process for declaring an emergency and terminating such a declaration in the City of Medford.

“Ch. 12.020 Purpose

The purpose of this chapter is to reduce the vulnerability of the city and its residents to loss of life, injury to persons or property, human suffering and financial loss resulting from emergencies, and to provide for recovery and relief assistance for the victims of emergencies.”

A declaration of an emergency is the responsibility of the Mayor. The planning and execution of the emergency management plan is the responsibility of the City Manager or designee. The MMC states *“If the Mayor, for any reason, is unable or unavailable to perform these duties, then the duties shall be performed in the following order of succession:”* The MMC goes on to list the elected officials.

A declaration for a state of emergency shall state the nature of the emergency, designate the geographic boundaries subject to the emergency procedures, state the duration of time for the emergency, and state any special regulations imposed by the state of emergency.

411 West 8th Street, Medford, OR 97501

Tel. 541.774.2000 • email: citymanager@cityofmedford.org • Fax 541.618.1700

The MMC specifically states *“All existing laws, ordinances, rules and orders inconsistent with this chapter shall be inoperative during the period of time and to the extent such inconsistencies exist.”*

The common intent behind a declaration of an emergency is to leverage resources from county, state, and federal programs when the City has exhausted its resources to respond to the emergency in a reasonable fashion. Any declaration of emergency by City will be filed with the Jackson County Emergency Management Office who in turn works to determine if the state’s Office of Emergency Management involvement is necessary.

Relative to short-term, severe weather events that threaten the safety of persons unsheltered due to exposure, the City Council has indicated a desire to know what actions the council or Mayor can take to allow for the operation of temporary emergency shelters. The declaration of an emergency would achieve this end, it could be argued that a declaration of emergency is not necessary to allow for the operation of temporary emergency shelters and that such an action could be seen as overreaching given the limited nature of the severe weather events most often referenced for the unsheltered population.

Conditional Use Permits and Shelters

The MMC requires a Conditional Use Permit (CUP) per Chapter 10.819A for Temporary Shelters. This requirement prevents the operation of temporary emergency shelters unless such a location obtains a permit and a CUP. In the case of any emergency situation when shelter is required, this CUP process is not feasible given the lengthy process and the nature of an emergency. This process is generally considered to be used for the temporary shelters that operate within the City in a more constant or reasonable fashion.

In order for a provider (non-profit, faith based, etc.) in the community or for the city to open and operate an emergency shelter in response to a severe weather event, the City needs to suspend enforcement (via a declaration of an emergency) of portions of Chapter 10 in the MMC, revise Chapter 10 and eliminate the CUP requirement for temporary shelters, or create a separate provision for emergency shelters.

Providers

Staff is in conversation with some leaders of the faith based community who may have an interest in operating emergency shelters during a severe weather event. Throughout the discussions, staff has been working to develop a set of requirements to satisfy fire and life safety and the building safety needs. Providers continue to provide their feedback on these requirements and how best between the city and the provider network we can establish a workable solution to meet minimum safety requirements for emergency shelters.

Providers have shown a willingness to open and operate emergency shelters for a short duration and have confidence that within their own organization they could provide these services without a significant amount of resources from outside agencies. However, it is well understood that the longer the need for emergency shelters is present, the more a provider would need assistance from other nonprofit or government aid agencies to continue operation.

The staffing and feeding at overnight shelters rise as the top concerns logistically and the concern grows the longer the shelter remains open or if the shelter is called upon for multiple openings throughout a winter season. There has been discussion to potentially develop a rotating schedule for providers as a means to alleviate the hardship on any one given organization. This remains an area for continued organizing and coordination.

Parameters of a Severe Weather Emergency

These parameters are offered as a starting recommendation, as such considerations must and should be taken into consideration at a local level to meet a local need.

Cold weather: Forecasted temperatures 20 degrees and below; or a measurable amount of snowfall; or a measurable amount of freezing rain; or a combination of circumstances that would threaten safety of a person exposed to such conditions for an extended amount of time.

Hot weather: Forecasted temperatures above 105 degrees and above; or a combination of circumstances that would threaten safety of a person exposed to such conditions for an extended amount of time.

Every effort by the city should be made to monitor the weather forecasts and to pre-position resources including the readying of emergency shelters up to five days in advance of a severe weather event. A determination to proclaim an emergency can occur at any time, however to activate the provider network in the most effective manner the city should strive to notify providers a minimum of 12 hours prior to the proclaimed emergency. Notification allows providers to make a final determination if they can be listed as an open shelter on a given night and for all public announcements to include the most comprehensive list of shelters and locations that are open for warming or cooling during the severe weather event.

The city should monitor the situation and make a determination every 12 hours if the severe weather event is forecasted to continue and when it appears that the event has passed the Mayor should terminate the emergency.

Emergency Shelter Requirement (Fire/Life/Building Safety)

The staff developed and finalized requirements for temporary shelters in October of 2018. Those requirements have been adjusted to meet the need of emergency shelters during this effort. Due to the short duration of emergency shelters, the requirements for a temporary shelter are reduced slightly where possible while still maintaining overall minimum safety.

The staff proposes developing a pre-inspection program for providers interested in potentially hosting an emergency shelter. The City would dedicate staff resources to conduct inspections and walk-through discussions to help providers meet our requirements and to prepare in the event of a declared or proclaimed emergency. This “pre-authorization” plan/list allows the City to reduce the lead time necessary to properly open safe shelters during an emergency.

This “pre-authorization” plan has been favorably received by providers who have been present for the discussions. The timeline and other details of how best to accomplish this have yet to be determined, however staff does not anticipate an unmanageable number of sites requiring pre-inspections.

Notification to the Community

In the lead up to a severe weather emergency, the City will communicate with providers from the “pre-authorization” list to determine if the provider can indeed open an emergency shelter for the upcoming event. If a provider is able to open as a shelter, the City will work to determine the shelter capacity, the population it can serve, and an estimate of any barriers to the shelter opening in time to meet the need of the community. This information will be communicated with the Mayor to help determine if the community can meet the need and if other resources are required. It is best if this information gathering effort and decision-making effort occur in the day(s) leading up to an event.

If a determination is made that emergency shelters are needed, the City will communicate as much specific information about shelters and other important matters to the public and the media. At this point, the providers would be transitioning from pre-positioning to open/operating as they make final preparation to shelter people.

City Liability

It is impossible to state that the City will ever avoid any claim to liability should an unfortunate event occur, however if the city is not actively operating any shelters it also reduces the likelihood of a liability claim. Additionally, the inspections that emergency shelters undergo do not then protect the operator from providing a safe environment, nor do they automatically make the city liable. This is not unlike any other building in the community- the city inspects buildings and yet a person may still have a claim

against a building or a business, it does not put the city in a position for liability for an error made by a building owner/operator.

The City should expect to assume more risk if a shelter is operated on city-owned property and again more risk if the city operates a shelter on city-owned property. The responsibility for providing a shelter can be complicated and providers should assess their capabilities within their own organizational structure and with their own advisors. The city does not assume liability for the operators of an emergency shelter.

Staff Recommendation

Assuming the City Council desires emergency shelters to operate in the City of Medford during severe weather emergencies, the following recommendations are provided for consideration:

1. Direct City staff to develop a “Shelter Site Pre-Authorization Plan” to determine which sites in the community are willing and can provide emergency shelters ahead of any need and in a fashion that brings the city and providers together to address a shelter need.
2. Address Chapter 10 in the Medford Municipal Code by creating a mechanism for Emergency Shelters that differs from Temporary Shelters and does not require a Conditional Use Permit.
3. Direct City staff to propose a rewrite of Chapter 12 in the Medford Municipal Code to align the Emergency Declaration process with current industry standards and build the flexibility needed for the City to safely execute operations during times of emergency.
4. Direct City staff to adopt administrative policies/requirements that address the fire/life/building safety issues for both temporary shelters and emergency shelters.
5. Consider the creation of an administrative policy that allows the City to execute emergency shelter plans given a specific set of parameters for severe weather without elevating the situation to an official declaration of an emergency.
6. When the City determines that opening Emergency Shelters is necessary, the City should make every effort to secure shelters at community based locations, staffed by community based organizations. City owned facilities are not optimal and even more so, City staff are not trained adequately to fully staff an emergency shelter responsibly at this time.

Summary

The CUP currently required of shelters is a barrier to allowing providers to provide short-term shelters during severe weather events. The legal restrictions can be overcome through the use of an emergency declaration or changes to the Medford Municipal Code.

The likelihood of successful emergency shelters is less cut and dry than defining the legal parameters. It requires ongoing coordination and organizing between the City, the faith based community, nonprofit providers, Jackson County, and other interested parties. This memorandum has prepared recommendations and discussion points from a position of allowing emergency shelters to exist in the community rather than proposing a city program to operate shelters. This places the city in a convening role to enable community partners to provide a service and therefore more of their buy-in and participation is needed to make such a program successful for the community.

Exhibit B

Medford Temporary Shelter Guidelines and Policies



City of Medford Temporary Shelter Guidelines and Policies

Effective Date: 10/11/18

Page: 1 of 7

1. Purpose:

These policies and guidelines recognize the public interest in providing shelter for individuals and families who would not otherwise have shelter or relief from extreme conditions. The guidelines are intended to provide guidance for applying for and operating a Temporary Shelter. The policies are intended to increase safety in Temporary Shelters by providing specific requirements based on best practices and lessons learned without making operation of Temporary Shelters cost-prohibitive.

2. Objective:

This objective of this document is to provide policies and guidelines that supplement City of Medford Municipal Code Section 10.819A requirements related to Temporary Shelters. These policies and guidelines include information from various City departments in one document. The guidelines provide operators of Temporary Shelters with helpful information related to the application process and operation of Temporary Shelters.

3. Recommended Application Steps:

Following the procedures and recommended steps below will help speed up the process of applying for a Temporary Shelter.

A. Review this document and the definitions at the end.

B. General

- a. Apply as soon as possible! The application process may take a while, and it is better to start sooner rather than later.
- b. The application process starts with the Planning Department. They may recommend that you talk to other departments, such as Building and Fire, prior to paying \$950 to apply for a Conditional Use Permit (CUP). A variety of City Departments are involved with the application process, extensions and approvals including Planning, Building, Fire, Police, and the City Manager's Office. The recommended steps for applying for a Temporary Shelter are provided below.
- c. There are three (3) separate approval paths, and each approval is required in order to operate a shelter. A Conditional Use Permit (CUP) is required through the planning department, a building permit will likely be required through building department, and a Temporary Shelter Operational Permit is required through the fire department (see contact information below).
- d. The operational period does not start when you apply for the permit, it begins the first day the shelter opens. Having an approval to operate a shelter just provides more flexibility on how soon the shelter may be opened.
- e. A new building permit and Temporary Shelter Operational Permit may be required prior to each operational Period. Once a CUP approval is received, a new one is not needed each operational period.

C. Key Department Contacts:

a. Building:

2nd Floor of the Lausmann Annex
200 S. Ivy St., Medford, OR 97501
541-774-2350
building@cityofmedford.org

b. Fire:

Lausmann Annex, Rm. 180
200 S. Ivy St., Medford, OR 97501
541-774-2300
fire@cityofmedford.org

c. Planning:

2nd Floor of the Lausmann Annex
200 S. Ivy St., Medford, OR 97501
541-774-2380
planning@cityofmedford.org

D. Recommended - Find a Potential Location (or locations).

- a. Once a list of potential buildings has been narrowed down, consult with the Building Department and Medford Fire-Rescue to help try to determine what the previous use of the building was, and help determine if the building fits the needs.
- b. Medford Building and Medford Fire often have information available about existing buildings. Working with these departments may help operators find the right building to suit the needs of the shelter, and hopefully help avoid cost-prohibitive construction requirements.

E. Recommended – Building and Fire Consultation

- a. A consultation is strongly recommended prior to submitting any applications or purchasing or leasing any property.
- b. Consult with Building and Fire to discuss the location and the proposed use
 - i. This may include a site visit.
 - ii. The Building or Fire departments may recommend consulting with a design professional to determine if the building would be a good fit. A design professional can help an operator identify what changes to a building may be required in order to meet the needs and desires of a particular shelter.
- c. It is helpful to have the following information available:
 - i. Location (address)
 - ii. Previous use for the building
 - iii. Proposed use for the building
 - iv. Key components of the draft operational plan
 1. Operational period (proposed number of operation days)
 2. Screening methods
 3. Shelter capacity (max number of people)
- d. Buildings that already have the following are more likely to meet fire and building code requirements for temporary uses where sleeping occurs:
 - i. An automatic fire sprinkler system

- ii. Smoke alarms
- iii. Carbon monoxide alarms are required where sleeping occurs unless approved otherwise by building and fire.
- iv. Egress (exiting)
- v. Accessibility (easy ADA access)
- vi. Bathrooms
- vii. Showers

F. Planning Department

- a. The application process for operating a temporary shelter begins at the Planning Department.
- b. CUP Applications
 - i. The applicant must fill out a CUP Application
 - ii. If the CUP is approved, a separate approval through building and fire will be required for each operational period.
 - iii. CUP applications require approval by the Planning Commission
 - iv. We recommend applying a minimum of 4 months ahead of the desired first day of operation.

G. Building Department

- a. Permits
 - i. Consult with the Building Department to determine if a permit is required
 - ii. A permit is required to construct, enlarge, alter, repair, move, change the character or use of the occupancy, or change the occupancy of a building or structure.
- b. Temporary Structure and Use: If a building will be used for a Temporary Shelter for less than 180 consecutive days, and the use of the building changes, a Temporary Structure and Use must be approved the Building Department.
- c. Example Scenario: In Oregon, there are very few requirements for upgrading a building where the use of that building has not changed. However, when the use of a building does change, the building often has to meet the requirements for new construction, and the requirements can be cost-prohibitive. For example, churches are designed to accommodate a lot of people. However, people attending church services are familiar with their surroundings and are fully alert. This a big advantage during an emergency. When a building used for a church is converted into a place for sleeping, the building and fire codes recognize that there is an increased life safety risk. When people are sleeping, it takes longer to become aware of an emergency and respond appropriately. For this reason, newer codes require smoke alarms and a fire sprinkler system in residential buildings (with sleeping uses). These life safety systems provide early warning and give people time to evacuate. As another example, there are some cases when change the use of a building requires seismic (earthquake) upgrades. In many cases, the least expensive option is to find an existing building that was previously used in a similar way and, therefore, does not require a "Change in Use" permit process through the building department.

H. Medford Fire-Rescue

- a. Temporary Shelter Operational Permit
 - i. This operational permit is required for each shelter. This permit is required in addition to any planning and building permits.

- ii. Contact Medford Fire-Rescue to apply for this permit.

4. **Operational Plan Policy**

An operational plan is required by Medford Municipal Code 10.819A(D)(1)(a). See below for policies related to the operational plan. The operational plan shall include:

- A. Items addressing client interaction
- B. Rules for shelter use, which may include:
 - a. Cause for refusal to enter, or eviction from, a shelter
 - b. Drug and alcohol policy
 - c. Shelter entry and closing times (if applicable)
 - d. Policy for re-entry to shelter
- C. Facility operations and maintenance
 - a. Coordinated entry
 - i. System for coordinating housing and shelter.
 - ii. See the Municipal Code for Continuum of Care requirements
 - iii. See Sonoma County for example (<https://sonomacounty.ca.gov/CDC/Coordinated-Entry-System/>)
 - b. Staffing operations including staffing of the access point, on-duty representative, and fire watch. The plan shall include provisions for backups
 - i. Medford Municipal Code Section 10.819A (D)(1)(c) has requirements for the minimum number of On-duty Representatives to staff shelters. This best practice provides a minimum level of safety both for the staff, and the people using the shelter.
 - c. Clients served (families, veterans, homeless, etc.)
 - d. Screening process (to verify max. number of people and Occupancy Classification – see policy below)
 - e. Property owner agreement (if the operator of the shelter does not own the property, but instead is renting or leasing it)
- D. Safety and Security
 - a. Safety and Security plan meeting all applicable codes and requirements including 10.819A(D)(4)
- E. Signage [10.819A(D)(5)(d)]
- F. Operational period
 - a. Start date and end date (provide number of calendar days from start date to end date)

5. **Lodging House Policy**

Temporary shelters meeting the definition of a “Lodging House” per building and fire codes have limited construction requirements. Smaller existing commercial buildings may be converted to these types of uses under a permit process through the Building Department. The building and fire code definitions of “Lodging House” do not imply or invoke the land use requirements for “Boarding / Lodging House” as defined in Chapter 10 of the Medford Municipal Code.

- A. Buildings meeting the fire and building code definition of "Lodging House" shall also meet the applicable requirements of Chapter 10 of the Medford Municipal code for "Temporary Shelter" in the case of a temporary use, or "Boarding/Lodging" house for a permanent use.
- B. Municipal Code Section 10.819A(D)(1)(b) requires a minimum of two (2) on-duty representatives, unless approved otherwise. Shelters meeting the code requirements for "Lodging House" shall be permitted (approved) to provide a minimum of one (1) on-duty representative, rather than two (2).
- C. This policy allows up to 16 guests and 5 guest rooms and requires guests (users/clients) to pay rent in, "money, goods, labor or otherwise" (see definition for "Lodging House").
- D. A Smoke and Carbon Monoxide Alarm Affidavit is required (see policy below).

6. *Smoke and Carbon Monoxide Alarm Affidavit*

This is a minimum requirement for all for temporary shelters. A signed affidavit shall be signed by the operator and submitted to Medford Fire rescue along with the Temporary Shelter Operational Permit Application.

- A. Battery operated smoke and carbon monoxide alarms may be provided when approved.
- B. INFO: Smoke alarms provide early detection of a fire and give people a chance to respond to a fire.

7. *Temporary Shelter Screening and Occupancy Classification Policy*

Shelters shall be classified per the current Oregon building codes. In addition to the requirements of the Oregon Structural Specialty Code (OSSC) and the Oregon Residential Specialty Code (ORSC), the following requirements shall apply to selecting the occupancy classification for a temporary shelter:

- A. Shelters for users/Clients that meet the definition of Limited Assistance Required (see definitions) shall be appropriately classified and shall meet the applicable requirements of the OSSC and/or ORSC. A screening process shall be required to identify any users clients that meet the definition of "Incapable of Self-Preservation"
- B. Shelters that do not provide a screening process shall be assumed to have users/clients that meet the definition of "Incapable of Self-Preservation" and shall meet all applicable building and fire code requirements related to this defined use.
- C. Operators that incorporate a screening process are required to include the proposed process in their operations plan. Operators shall be responsible for training all on-duty representatives and fire watch personnel on the screening process and procedures to follow.

8. *On-Duty Representative Policy*

The policies below are in addition to the Municipal code requirements.

- A. On-duty representatives shall be provided at a ratio of at least one on-duty representative per 25 clients, unless approved otherwise.

- B. The ratio provided shall be included in the operational plan.

10. Definitions

- A. Incapable of Self-Preservation (2014 Oregon Structural Specialty Code): Persons who because of age, physical limitation, mental limitations, chemical dependency, or medical treatment cannot respond as an individual to an emergency situation.
- B. Limited Assistance Required: Persons who because of age, physical limitation, mental limitations, chemical dependency, or medical treatment require limited verbal or physical assistance while responding to an emergency situation.
- C. Lodging House: Any building or portion thereof containing not more than five guest rooms where rent is paid in money, goods, labor or otherwise. The total number of guest shall not exceed 16. The building and fire code definitions of "Lodging House" do not imply or invoke the planning requirements for "Boarding / Lodging House" as defined in Chapter 10 of the Medford Municipal Code (See "Lodging House" Policy below)
- D. Screening Process: process to identify persons that meet the definition of "Limited Assistance Required" or "Incapable of Self-Preservation" when entering, or while using, a Temporary Shelter.
- E. Definitions from Medford Municipal Code 10.012:

Homeless. Individual(s) or families who are (See Medford Municipal Code Section 10.012:

- (1) Living in a place not meant for human habitation;
- (2) Living in an emergency shelter or in transitional housing;
- (3) At risk of imminently (within 14 days or less) losing their primary nighttime residence, which may include hotels/motels or sleeping in a residence as a temporary guest, and lack the resources or support networks to remain in housing;
- (4) Unstably housed and likely to remain unstably housed;
- (5) Attempting to flee domestic violence, have no other residence, and lack the resources or support networks to obtain permanent housing; or
- (6) At risk to exposure of extreme weather conditions.

Temporary Shelter. A temporary use within a building meant to provide relief from extreme weather and/or substandard living conditions for individuals or families who are homeless.

- F. Definitions From Medford Municipal Code 10.819A(B):

(B) Definitions Pertaining to Temporary Shelters

The following definitions shall only be applied, as defined in this subsection, to Temporary Shelters. If used otherwise in Chapter 10 refer to Section 10.012 Definitions, Specific.

- (1) **Access Point**: The main point of entry and exit for a Temporary Shelter where users, visitors, and other persons must sign in and out to maintain security within a shelter.
- (2) **Client(s)**: Person or persons who receive services from an operator of a Temporary Shelter which shall include overnight sleeping, and may include other

items established per the shelter's operations plan as required in Section 10.819A(D)(1)(b).

- (3) Operator: The organization in charge of daily operations of a temporary shelter. The operator shall be a civic, non-profit, public, religious, membership based, or otherwise competent organization and shall be the applicant for the land use review of a Temporary Shelter.
- (4) Operational Period: An operator's established days of operations.
- (5) Operations Plan: The guiding document for an operator to use in determining the standards clients must adhere to in a Temporary Shelter.
- (6) User(s): See 10.819A(B)(2) client(s).

Exhibit C

Proposed draft for new Temporary Shelter Guidelines



City of Medford Temporary Shelter Requirements

Effective Date: 10/11/18

Page: 1 of 5

GENERAL:

Purpose:

These permit requirements have been established in coordination with other City of Medford departments including Building, Planning, Police, and Fire to provide a safe solution for providing Temporary Shelters for sleeping purposes (OSFM TA 11-14). These permit requirements allow a building not normally designated as an "R" Occupancy (use of a building, or a portion thereof, for temporary living and sleeping purposes) to be used as a Temporary Shelter, if approved (OFC 104.8, 1101.1). These requirements apply to all Temporary Shelters, including Emergency Shelters and Temporary Shelters per Section 10.012 of the Medford Municipal Code, unless noted otherwise.

Approval Requirements:

Prior to approval for use of a Temporary Shelter, the following is required:

- Approval from the Planning Department for use of a location
 - Not required for use of an Emergency Shelter
- Approval from the Medford Building Department
- A fire inspection and approval from the fire code official (Fire Marshal or Deputy Fire Marshal).
 - If not included, please request a Business Safety Checklist for common fire hazards.

DEFINITIONS:

Incapable of Self-Preservation (OFC Section 202): Persons who because of age, physical limitation, mental limitations, chemical dependency, or medical treatment cannot respond as an individual to an emergency situation.

Individual Sleeping Area: An individual space or area provided per person (occupant). The minimum dimensions shall be 5 ft x 8 ft, unless otherwise approved. This area shall include adequate space for personal belongings. Each individual shall use the allotted area and shall not obstruct the means of egress, including aisles.

Limited Assistance: Persons who because of age, physical limitation, mental limitations, chemical dependency, or medical treatment require limited verbal or physical assistance while responding to an emergency situation.

Marking of Sleeping Area: Markings, such as tape or another approved method, shall be provided to designate and define the exit access including aisles, and exits. Markings may also be used, and are encouraged, for individual sleeping areas. The purpose of these markings is to maintain clear egress paths at all times.

Emergency Shelter: a Temporary Shelter that is pre-approved (free) by Building and Fire for use during an emergency declaration or proclamation.

Sleeping Area: Space or area that includes, but is not limited to, exit access including aisles, and a row or rows of individual sleeping areas.



City of Medford Temporary Shelter Requirements

Effective Date: 10/11/18

Page: 2 of 5

LOCATION PLANNING AND REQUIREMENTS:

Occupancy Requirements:

How occupants respond during an emergency can affect the risk of all occupants. Considerations that can influence the ability to respond correctly to an emergency include, but are not limited to, mental and physical abilities. For this reason, there are more strict requirements for locations where some of the occupants require physical or verbal assistance to respond to an emergency including fire protection, staffing, training, etc. As such, the following requirements apply for Temporary Shelters:

- (OFC 1101.1) Persons who are Incapable of Self-Preservation shall not be permitted to stay at a Temporary Shelter. The operations plan shall include procedures for moving persons who are incapable of self-preservation to a location that can safely meet their needs.
- (OFC 104.8, 1101.1) Shelters may allow persons requiring Limited Assistance to sleep at the shelter when approved. Considerations for approval include, but are not limited to:
 - The number of persons requiring limited assistance.
 - The presence of fire protection systems such as an automatic sprinkler system
 - Staffing
 - Staff training
 - Modifications to the Emergency Evacuation Plan.
 - Provisions for moving individuals who require limited assistance to a different location when the maximum number is exceeded.

Fire Protection System Requirements:

The following life-safety requirements apply to buildings used as a temporary shelter:

- (OFC 1101.1, 104.8) Automatic Sprinkler System. Buildings used as temporary shelters shall be protected throughout with an approved Automatic Sprinkler System, with the following exceptions:
 - Approval through Medford Fire-Rescue and the Building Department is required in order to locate a temporary shelter in a building not protected throughout with a fire sprinkler system; the location may only be on the first floor (with exits directly to the outside at ground level).
 - **An automatic fire sprinkler system is not required for Emergency Shelters that are located on the ground floor with a minimum of two exits at grade.**

Means of Egress (Exiting – OFC Chapter 10):

- All floor levels with temporary shelter areas shall have a minimum of two means of egress (exits) from each floor level, and shall have exit signs and emergency lighting. All means of egress (exit) paths shall be maintained free of obstructions at all times. Exits from sleeping areas shall be as follows;
- Sleeping areas located on the ground floor of a temporary shelter with an occupant load of 49 or less shall have a least one (1) exit and at least one (1) window qualifying as an escape or rescue window as defined by the building code.
- All other floor levels used as temporary shelter sleeping areas that have an occupant load of 10 or more shall have two (2) exits from the area. The exits serving the areas shall be separated by a distance equal to at least 1/2 (1/3 if automatic fire suppression system is present) of the longest diagonal distance of the area.
- **Doors shall operate properly.**



City of Medford Temporary Shelter Requirements

Effective Date: 10/11/18

Page: 3 of 5

- **Egress for *Sleeping Areas*:**
 - *Individual Sleeping Areas* shall be limited to one (1) or two (2) rows.
 - A 36" min. aisle shall be provided (OFC 1017.5):
 - on both sides where two *Individual Sleeping Areas* are provided in two rows that are not separated by an aisle
 - on at least one side of a single row of *Individual Sleeping Areas*
 - **Egress paths** shall be marked (such as with tape on the floor)
- **(OFC 1007.1) Accessibility:** a minimum of one (1) accessible egress path shall be provided.

Maximum Number of Occupants Allowed:

(OFC 104.8, 1004.1.2) The maximum number of allowable temporary shelter occupants shall be calculated using an occupant load factor of one (1) individual for every 100 square feet minimum in sleeping areas. For example, a room with 980 square feet of sleeping area would be allowed to provide temporary shelter for up to 9 occupants. 980 divided by 100 = 9.8, and the number must be rounded down to 9. The occupant load shall be approved by the fire code official.

PLEASE NOTE: Additional requirements will apply when the occupant load exceeds 49 people

Smoke Alarms and Detection (OFC 907.2):

- Smoke alarms may be battery operated.
- All temporary shelter sleeping areas shall be provided with approved smoke alarms or a complete approved smoke detection system.
- All other areas of the building used for temporary shelter operations shall be equipped with smoke alarms or a smoke detection system as required by the local fire code official.

Carbon Monoxide (CO) Alarms and Detection (OFC 908.7):

- All temporary shelter sleeping areas shall be provided with approved carbon monoxide alarms or a complete approved detection system in buildings that have a carbon monoxide source such as a heater, fireplace, furnace, appliance or cooking source that uses coal, wood, petroleum products and other fuels that emit carbon monoxide as a by-product of combustion. This would include buildings with an attached garage with a door, ductwork or ventilation shaft that communicates with the rooms intended for sleeping.
- Carbon monoxide alarms may be battery powered.

Cooking Facilities:

(OFC 609.1 and 904.11) Shelters where food is provided shall meet all requirements for new construction for cooking equipment.

Storage:

(OFC Section 315, Chapter 10) Provisions for storage shall be provided in order to maintain egress paths, and allow storage of items that are not permitted within the shelter.

Sanitation:

Toilets, hand washing, and trash disposal shall be provided. Provisions for bathing are typically recommended, but not required.



City of Medford Temporary Shelter Requirements

Effective Date: 10/11/18

Page: 4 of 5

OPERATIONAL (USE) REQUIREMENTS:

Staffing:

A minimum ratio of staff per occupants shall be provides as follows:

- 1 to 25 per the Municipal Code
- 1 to 50 for Emergency Shelters

Notification:

The fire code official (Fire Marshal or Deputy Fire Marshal) shall be notified 48 hours minimum prior to each non-consecutive use of a Temporary Shelter. The fire code official may require a fire inspection prior to the shelter being used. A fire inspection shall be completed and final approval shall be received prior to opening a Temporary Shelter for the first time.

- *Emergency Shelter Exception: the fire code official shall be notified 24 hours minimum prior to use of this type of Temporary shelter. A minimum of 48 hours is preferred.*

Time limits:

Time limit requirements in the City of Medford municipal code for temporary shelters shall be applicable where in conflict with these requirements. A building may be used as a temporary shelter for a maximum of ninety days (90) within any six (6) month period of time beginning on the first (1st) day of occupancy or as approved by the local authority having jurisdiction.

- Temporary uses exceeding a six months (180 days) time period require approval from the Building Code Official
- *Emergency Shelter Exception: the time limits above do not apply.*

Emergency Evacuation Plan (OFC Chapter 4):

All temporary shelters shall create and maintain an approved emergency evacuation plan addressing the evacuation of all occupants in an emergency event. At a minimum, the emergency evacuation plan shall contain the following:

- Emergency Response Plan: complete and review with a fire code official
- Occupant list: A list of all occupants each night must be made maintained and made available to the emergency personnel in the event of a fire or incident.
- Building floor plans: Building floor plans for each floor of the temporary shelter shall be posted throughout the shelter, and shall include:
 - *Sleeping Areas* clearly identified.
 - Room size: the square footage of all rooms of the temporary shelter.
 - Evacuation Routes: the primary and secondary egress (exit) paths from all areas of the temporary shelter shall be shown.
 - Accessible egress routes: locations shall be shown on the building floor plans.
 - Life-safety systems: include locations for fire sprinkler system including riser room, fire alarm panel and controls, etc.
 - Manual Fire Alarm Pull Boxes, if present
 - Portable Fire Extinguishers
 - AED (Automated External Defibrillator), if present



City of Medford Temporary Shelter Requirements

Effective Date: 10/11/18
Page: 5 of 5

Documentation:

Documentation of all fire safety requirements including copies of an Emergency Plan and the Temporary Shelter Operational Plan shall be maintained on site and shall be immediately available for review if requested by the fire code official.

Fire Watch:

During sleeping hours, a fire watch (see attached Fire Watch packet) shall be maintained continuously. This means at least one responsible person shall be awake and assigned this responsibility. This duty may be rotated among a number of responsible adults during the sleeping hours. The fire watch person shall be equipped with a working flashlight and have access to a phone or carry a cell phone on their person. They shall be familiar with the building, the emergency plan, and shall be trained on procedures during an emergency.

General Safety Requirements:

- Alcohol and drugs shall not be in possession or used
- (OFC 310) No smoking inside; provisions for smoking outside, if allowed
- (OFC 305) No open flame or other ignition devices (unless permitted in storage areas)
- No portable heaters. Outside use to be approved.

General Safety Recommendations:

Separate locations or areas for different populations including families, single men, etc. shall be required, unless approved otherwise.

Exhibit D

Risk/Liability Matrix

The more control (responsibility) the City assumes, the greater the liability risk. From least to greatest:

Spectrum of increasing level of involvement / control over potential program and/or specific shelter:		Cumulative risk of incrementally more involvement in operation of program and/or specific shelter:
1	Determine what severe weather condition would trigger a suspension of ordinary code for temporary shelters and if it would be triggered simply by weather forecast, or only by specific action taken each time the suspension would go into effect.	Minimal risk if making a blanket determination, but greater risk if requiring specific proclamation action, in case one “should have” been declared and wasn’t.
2	Suspend ordinary regulatory requirements for duration of severe weather condition to allow provision of temporary overnight shelter by willing non-profits with their resources (simply “getting out of the way” of non-profits).	Minimal risk.
3	Determine by City staff the minimal life safety requirements that would need to be in place and performing inspections of locations to preauthorize those with essential features to operate on a temporary urgent need basis under triggered condition.	Ordinary operational risk.
4	Act as a communication exchange for community of participating agencies to post temporary shelter locations and schedules	Ordinary operational risk.
For involvement levels below, City assumes new risk for operation of program/services normally operated by <u>counties</u> throughout the state. City has no health and human services department or trained professional social worker staff to do so.		
5	Coordinate participating shelters through common program structure, rules, operating guidelines, training, through a City employee hired to manage program.	Slightly increased risk with more control over program, if someone alleges negligent training of volunteer participants or some other problem in the operational model as a “City program.”
6	Provide a City-owned facility at which a willing non-profit organization could operate a shelter with that agency’s staff, volunteers, and financial resources. The only City employee involved would be a facility contact regarding the building itself. The only City resource would be the facility.	Above risk and increased risk for potential: <ul style="list-style-type: none"> • Damage or theft of City property • Risk of use of property for other than was designed, if some feature is alleged to be inadequate for shelter purpose. • Employee risk for facilities person involved (see below). • Risk of injury/damage claim from program operators and shelter guests. • Liability risk of using facility for other programs after its use as a shelter— would require time to clean and clear after shelter use before use for children’s programs, or other. • Risk of shelter participants lingering in area before and after shelter operation, overlapping with other City programs.
7	Open a City-owned facility, using City resources for materials, and fully staff it with City Employees who have been properly trained in their roles and operate within job classifications for employee benefit obligations (including workers compensation requirements).	All of above and significantly increased risk for full operation of shelter: <ul style="list-style-type: none"> • Risk to employees for injury from shelter activity or security risk from participants (increased workers comp insurance costs for type of work and experience modification factor harm if injuries). • Risk of claims (including meritless) from participants for injury, illness, abuse, discrimination, theft, property loss, animals.

Exhibit E

EPA Handbook on Extreme Heat Events

Excessive Heat Events Guidebook



EPA 430-B-16-001 | June 2006
Updated Appendix A | March 2016



FEMA

United States Environmental Protection Agency
Office of Atmospheric Programs (6207J)
1200 Pennsylvania Avenue NW, Washington, DC 20460



How to obtain copies

You can electronically download this document from EPA's Heat Island Site at <http://www.epa.gov/heatisland/about/heatresponseprograms.html>. To request free copies of this report, call the National Service Center for Environmental Publications (NSCEP) at 1-800-490-9198.

For further information

For further information, contact Victoria Ludwig, 202-343-9291, ludwig.victoria@epa.gov, U.S. Environmental Protection Agency.

Excessive Heat Events Guidebook



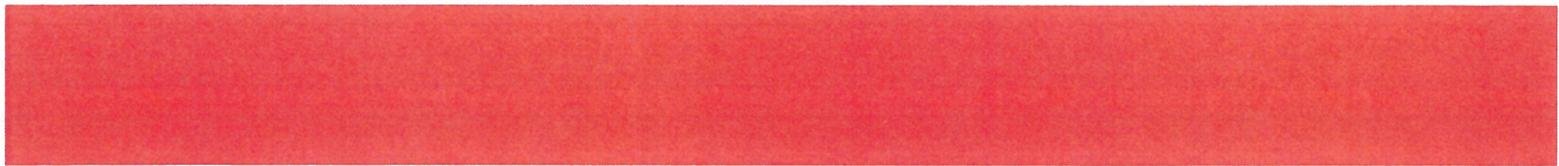
EPA 430-B-16-001 | June 2006
Updated Appendix A | March 2016

United States Environmental Protection Agency
Office of Atmospheric Programs (6207J)
1200 Pennsylvania Avenue NW, Washington, DC 20460

Table of Contents

Acknowledgments	1
List of Acronyms and Abbreviations	3
Summary	5
Chapter 1 Overview	7
1.1 Why Care about EHEs?	7
1.2 Guidebook Goals	7
1.3 Guidebook Development	8
Chapter 2 EHE Health Impacts and Risk Sources	9
2.1 Defining an EHE	9
2.2 Health Risks Attributable to EHE Conditions	10
2.3 Quantifying the Health Impacts of EHEs	11
2.3.1 EHEs and U.S. mortality	12
2.3.2 EHEs and U.S. morbidity	14
2.4 Identifying Characteristics that Affect EHE Health Risks	16
2.4.1 Meteorological conditions	16
2.4.2 Demographic sensitivities	17
2.4.3 Behavioral choices	17
2.4.4 Regional factors	18
Chapter 3 Summary of Current EHE Notification and Response Programs	21
3.1 Elements in Select EHE Programs	21
3.1.1 EHE prediction	23
3.1.2 EHE risk assessment	23
3.1.3 EHE notification and response	24
3.1.4 EHE mitigation	26
3.2 Case Studies in the Development and Implementation of EHE Programs	26
3.2.1 Philadelphia	26
3.2.2 Toronto	30
3.2.3 Phoenix	32
3.3 Evidence on the Performance of EHE Programs	33

Chapter 4 Recommendations for EHE Notification and Response Programs . . .	35
4.1 EHE Definition and Forecasting	35
4.1.1 EHE criteria must reflect local conditions	35
4.1.2 Ensure access to timely meteorological forecasts	36
4.2 Public Education and Awareness of EHE Risk Factors and Health Impacts	36
4.2.1 Increase and improve EHE notification and public education	36
4.2.2 Provide information on proper use of portable electric fans during EHEs	37
4.3 EHE Response Preparation	38
4.3.1 Develop a clear plan of action identifying roles and responsibilities	38
4.3.2 Develop long-term urban planning programs to minimize heat island formation	39
4.4 EHE Response Actions	39
4.5 Review EHE Programs to Address Changing Needs, Opportunities, and Constraints	41
References	43
Appendix A: Excessive Heat Event Online Federal Resources	47
Appendix B: Use of Portable Electric Fans during Excessive Heat Events	49
Appendix C: Excessive Heat Events Guidebook in Brief	51



Acknowledgments

The primary agencies that partnered to support this guidebook's development are the U.S. Environmental Protection Agency (EPA), the Centers for Disease Control and Prevention (CDC), the National Oceanic and Atmospheric Administration's (NOAA's) National Weather Service (NWS), and the U.S. Department of Homeland Security (DHS).

This guidebook reflects the commitment of individuals who contributed their time and expertise to guide its development while evaluating a wide range of information. The key contacts at each of the partnering agencies were instrumental in the guidebook's development. Alan Perrin and Jason Samenow of EPA served as the guidebook's day-to-day project managers from its conceptualization through production. Jannie Ferrell and Mark Tew of NOAA's NWS, George Luber and Mike McGeehin of CDC, and Carl Adrianopoli of DHS similarly served as the principal guidebook contacts at their respective agencies, facilitating access to the respective staff and resources of those agencies. David Mills of Stratus Consulting managed the guidebook's technical development as the primary EPA consultant. He was greatly assisted in this work by Dr. Laurence Kalkstein of Applied Climatologists Inc. and the University of Delaware Center for Climatic Research. Dr. Kalkstein helped pioneer, and continues to lead, the development of integrated meteorological and human health models for forecasting excessive heat event (EHE) conditions. He also contributed a wealth of background information in the form of published articles about and insight into forecasting EHEs, quantifying their health impacts, and coordinating the development of EHE watch/warning systems.

Ultimately, though, this guidebook could not have been developed without the involvement of the members of the Technical Working Group (TWG) that was assembled to help identify and summarize essential information and to comment on drafts of the guidebook. Their collective experience designing, implementing, supporting, operating, and evaluating EHE notification and response programs throughout the United States and Canada was an invaluable resource. The members of the TWG are as follows:

- ▶ Nancy Day and Marco Vittiglio, *Toronto Public Health*
- ▶ Timothy Burroughs, Nikolaas Dietsch, Anne Grambsch, and Kathy Sykes, *EPA*
- ▶ Tony Haffer, Melinda Hinojosa, and Paul Trotter, *NOAA/NWS*
- ▶ Jerry Libby (retired) and Lawrence Robinson, *City of Philadelphia Department of Public Health*
- ▶ Christopher Payne, *Cincinnati Health Commissioner's Office*
- ▶ Liz Robinson, *Energy Coordinating Agency of Philadelphia*.

The TWG's guidance and perspective make this guidebook such a potentially useful resource. The members' enthusiasm and commitment of time to the guidebook's development are deeply appreciated by the partnering agencies and those involved with the guidebook's technical development.



Finally, extremely helpful comments were received on a final draft of the guidebook from colleagues and researchers contacted by members of the TWG. In addition to staff at the partnering agencies, these reviewers included:

Pamela Blixt, *City of Minneapolis Emergency Preparedness Coordinator*; Robert Davis and Chip Knappenberger, *New Hope Environmental Services*; Kristie Ebi, *Exponent Inc.*; Pat Finnegan, *Metropolitan Chicago Healthcare Council*; Robert French and Warren Leek, *Maricopa County*; Stephen Keach, *Perrin Quarles Associates*; Sari Kovats, *London School of Hygiene and Tropical Medicine*; Marc Rosenthal, *Yale University*; Jonathan Skindlov, *Salt River Project Water Resource Operations*; Steven Wallace, *University of California, Los Angeles Center for Health Policy Research*; and Scott Wright, *University of Utah*.

List of Acronyms and Abbreviations

CDC	Centers for Disease Control and Prevention
CSA	Canadian Standards Approved
DHS	U.S. Department of Homeland Security
EHE	excessive heat event
EMS	emergency medical service
EPA	U.S. Environmental Protection Agency
NOAA	National Oceanic and Atmospheric Administration
NWS	National Weather Service
PCA	Philadelphia Corporation for Aging
SMSA	standard metropolitan statistical area
SSC	spatial synoptic classification
TWG	Technical Working Group
UL	Underwriter Laboratories



Summary

Introduction

Excessive heat events (EHEs) are and will continue to be a fact of life in the United States. These events are a public health threat because they often increase the number of daily deaths (mortality) and other nonfatal adverse health outcomes (morbidity) in affected populations. Distinct groups within the population, generally those who are older, very young, or poor, or have physical challenges or mental impairments, are at elevated risk for experiencing EHE-attributable health problems. However, because EHEs can be accurately forecasted and a number of low cost but effective responses are well understood, future health impacts of EHEs could be reduced. This guidebook provides critical information that local public health officials and others need to begin assessing their EHE vulnerability and developing and implementing EHE notification and response programs.

Health impacts of EHEs

EHE conditions are defined by summertime weather that is substantially hotter and/or more humid than average for a location at that time of year. EHE conditions can increase the incidence of mortality and morbidity in affected populations. Recent examples of EHE health impacts include:

- ▶ More than 15,000 deaths in France alone (all of western Europe was affected) attributed to EHE conditions in August 2003
- ▶ More than 700 deaths attributed to EHE conditions in Cook County, Illinois, in July 1995
- ▶ Roughly 120 deaths attributed to EHE conditions in Philadelphia, Pennsylvania, in July 1993.

Concern over the potential future health impacts of EHEs follows research conclusions that EHEs may become more frequent, more severe, or both in the United States.

Responding to EHE conditions

The potential for reducing future health impacts of EHEs in the United States is significant for several reasons.

First, meteorologists can accurately forecast EHE development and the severity of the associated conditions with several days of lead time. This provides an opportunity to activate established EHE notification and response plans or to implement short-term emergency response actions absent an existing plan.

Second, specific high-risk groups typically experience a disproportionate number of health impacts from EHE conditions. The populations that have physical, social, and economic factors and the specific actions that make them at high risk include:

- ▶ Older persons (age > 65)
- ▶ Infants (age < 1)
- ▶ The homeless
- ▶ The poor

- ▶ People who are socially isolated
- ▶ People with mobility restrictions or mental impairments
- ▶ People taking certain medications (e.g., for high blood pressure, depression, insomnia)
- ▶ People engaged in vigorous outdoor exercise or work or those under the influence of drugs or alcohol.

Identifying these high-risk groups in given locations allows public health officials to develop and implement targeted EHE notification and response actions that focus surveillance and relief efforts on those at greatest risk.

Third, broad consensus exists on the types of actions that will provide relief to those at risk during EHEs and help minimize associated health impacts. These actions include:

- ▶ Establishing and facilitating access to air-conditioned public shelters
- ▶ Ensuring real-time public access to information on the risks of the EHE conditions and appropriate responses through broadcast media, web sites, toll-free phone lines, and other means
- ▶ Establishing systems to alert public health officials about high-risk individuals or those in distress during an EHE (e.g., phone hotlines, high-risk lists)
- ▶ Directly assessing and, if needed, intervening on behalf of those at greatest risk (e.g., the homeless, older people, those with known medical conditions).

Experience in several North American cities has demonstrated that comprehensive and effective EHE notification and response programs can be developed and implemented at relatively low cost. These programs generally use available resources instead of creating EHE-specific institutions. This approach recognizes that short-term resource reallocations for EHEs are justified by the severity of their public health risks, the limited duration and frequency of the events, and the cost-effectiveness of the reallocations.

Guidebook goals and next steps

This guidebook provides interested public health officials with enough background information on EHE risks and impacts to roughly assess potential local health risks from EHEs. In addition, it provides a menu of notification and response actions to consider when developing or enhancing a local EHE program.

The 2005 U.S. hurricane season was a stark reminder that inadequate public and private preparation and response to well-forecasted and well-understood extreme meteorological phenomena can have severe public health consequences.

The remaining public health challenge for EHEs is to develop and implement meaningful EHE notification and response programs that increase public awareness and lessen future adverse health impacts.

EHEs can increase the number of deaths (mortality) and nonfatal outcomes (morbidity) in vulnerable populations, including older people, the very young, the homeless, and people with cognitive and physical impairments (NOAA, 1995; American Medical Association Council on Scientific Affairs, 1997; Semenza et al., 1999). Climate research suggests that future health risks of EHEs could increase with an increase in EHE frequency and severity (Meehl and Tebaldi, 2004). At the same time, demographic patterns including increasing urbanization will increase the size and percentage of the vulnerable U.S. population. To develop appropriate EHE responses, local officials need to understand the risks that these events pose to their populations and their response options. The intent of this guidebook is to address both needs.

1.1 Why Care about EHEs?

Studies estimate that the combined EHE-attributable summertime mortality for several vulnerable U.S. metropolitan areas is well above 1,000 deaths per year (Kalkstein, 1997; Davis et al., 2003a). Although similar research to quantify EHE-attributable mortality in rural areas has not been completed, recent research (Sheridan and Dolney, 2003) found evidence of such an impact.

Despite the history of adverse health impacts, there is consensus that most of these outcomes are preventable (CDC, 2004a). Lessening future adverse health outcomes from EHEs will require improving the awareness of public health officials and the general public about the health risks of EHEs while continuing to develop and implement effective EHE notification and response programs.

1.2 Guidebook Goals

This guidebook has two basic goals: first, to provide local health and public safety officials with the information they need to develop EHE criteria and evaluate the potential health impacts of EHEs, and second, to offer a menu of EHE notification and response actions to be considered.

To meet these goals, this guidebook is organized as follows.

Chapter 2 provides information on EHE-attributable health impacts and sources of risk that affect the vulnerability of individuals and communities to EHEs. Specific information provided in the chapter includes:

- ▶ A general EHE definition
- ▶ Guidance on criteria for EHE forecasting and identifying EHE conditions
- ▶ Estimates of the number and rate of EHE-attributable summertime deaths for select U.S. metropolitan areas
- ▶ A review of the meteorological, demographic, behavioral, and regional characteristics that increase health risks from EHEs.

Chapter 3 gives the menu of notification and response options that local officials can use as a starting point when considering whether to develop or enhance an EHE program. This menu consists of the following information:

- ▶ The components of current EHE notification and response programs
- ▶ Case studies of specific EHE response programs to understand their development and lessons learned
- ▶ A review of the efficacy of EHE response programs.

Chapter 4 provides recommendations that should be considered when developing an EHE notification and response program. Specifically, this chapter contains:

- ▶ Guidance on specific actions to consider when planning to develop or enhance an EHE program
- ▶ Recommendations for coordinating EHE programs with other public health programs (e.g., ozone alert programs).

In addition, the guidebook includes a series of appendices with information that officials may want to incorporate in other materials or make available independent of the guidebook. This information includes:

- ▶ A partial list of resources for additional information on EHE-attributable health risks and impacts and details on EHE programs (**Appendix A**)
- ▶ Guidance on the personal use of portable electric fans during EHEs (**Appendix B**)
- ▶ A summary of specific actions people and communities can take in response to forecast EHE conditions to reduce the risk of experiencing heat-attributable health problems (**Appendix C**).

1.3 Guidebook Development

Other documents have summarized the health risks of EHEs, described the factors that increase an individual's health risk during these conditions, and recommended elements for EHE notification and response programs (e.g., *Basu and Samet, 2002; Bernard and McGeehin, 2004; CDC, 2004a,c; FEMA, 2005b; U.S. EPA, 2005*).

This guidebook, however, is unique because it was developed as a collaborative effort among several of the principal federal agencies responsible for addressing EHEs: the Centers for Disease Control and Prevention (CDC), the National Oceanic and Atmospheric Administration's (NOAA's) National Weather Service (NWS), the U.S. Department of Homeland Security (DHS), and the U.S. Environmental Protection Agency (EPA) along with three other institutions with extensive experience developing and operating recognized EHE programs in the United States and abroad: the Philadelphia Health Department, Toronto Public Health, and the University of Delaware Center for Climatic Research.

Summarizing the collective insight and experience of the individuals from these organizations was facilitated through the participation of their staff in a Technical Working Group (TWG). The TWG helped shape the guidebook's content through regular group discussions and review of draft versions of the guidebook.

This chapter first defines an EHE and reviews possible criteria for identifying EHE conditions, followed by a discussion of the range of EHE-attributable medical conditions, adverse health outcomes, and mortality estimates for several U.S. metropolitan areas. It also reviews the characteristics that can affect an individual's health risk and the incidence of adverse health outcomes in a population.

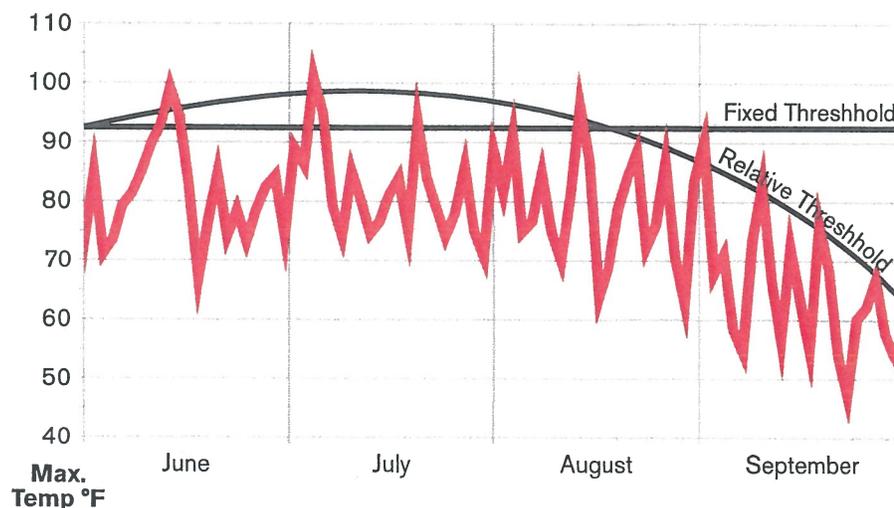
2.1 Defining an EHE

EHE conditions are defined by summertime weather that is substantially hotter and/or more humid than average for a location at that time of year. Because how hot it feels depends on the interaction of multiple meteorological variables (e.g., temperature, humidity, cloud cover), EHE criteria typically shift by location and time of year. In other words, Boston, Philadelphia, Miami, Dallas, Chicago, San Diego, and Seattle are likely to have different EHE criteria at any point in the summer to reflect different local standards for unusually hot summertime weather. In addition, these criteria are likely to change for each city over the summer. As a result, reliable fixed absolute criteria, e.g., a summer day with a maximum temperature of at least 90°F, are unlikely to be specified.

There are different ways to identify EHE conditions. Some locations evaluate current and forecast weather to identify EHE conditions with site-specific, weather-based mortality algorithms. Other locations identify and forecast EHE conditions based on statistical comparisons to historical meteorological baselines. For example, the criterion for EHE conditions could be an actual or forecast daily high temperature that is equal to or exceeds the 95th percentile value from a historical distribution for a defined time period (e.g., the summer or a month-long window centered on the date).

Figure 2.1 presents a hypothetical example that shows the difference in defining EHE conditions when using a seasonally adjusted relative temperature versus a fixed temperature criterion.

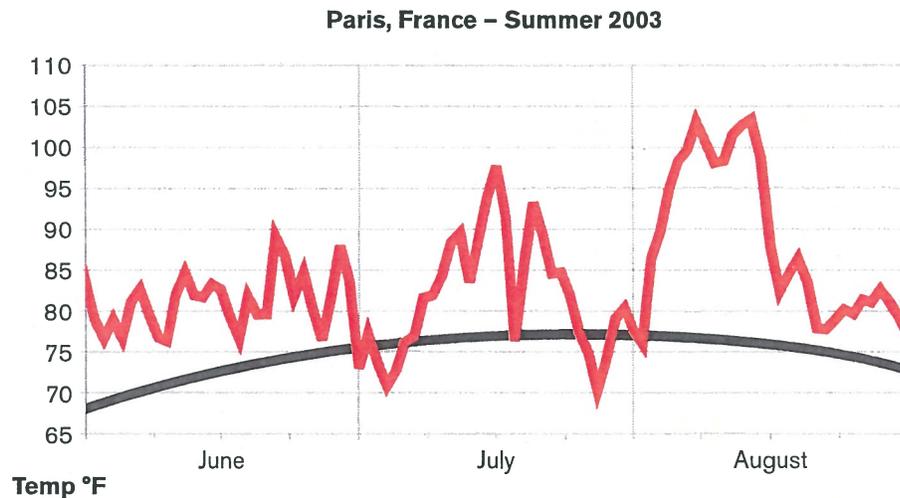
Figure 2.1. An example illustrating the difference between a seasonally adjusted relative temperature threshold and a fixed absolute temperature threshold for defining EHE conditions. *Source: Personal communication, B. Davis, New Hope Environmental Services, August 2005.*



Representations of actual EHEs can help illustrate these conditions. During the summer of 2003, Western Europe experienced EHE conditions of unprecedented severity. *Figure 2.2* presents the June through August 2003 daily maximum temperature readings in Paris with the corresponding average daily maximum temperature from the historical record.

Although the June and July temperatures in *Figure 2.2* may not seem exceptional, the extent to which they generally exceeded the long-term average shows why Paris experienced EHE conditions. The period from August 3 to August 17, however, is notable for its absolute temperatures and its tremendous deviation from typical conditions. Reflecting the significant health risks of EHE conditions, France experienced roughly 15,000 heat-related deaths during this period (*Koppe et al., 2004*).

Figure 2.2. Actual (red line) vs. average (black line) daily maximum temperatures



2.2 Health Risks Attributable to EHE Conditions

Maintaining a consistent internal body temperature, generally 98.6°F, is essential to normal physical functioning (*American Medical Association Council on Scientific Affairs, 1997*). EHE conditions stress the body's ability to maintain this ideal internal temperature. If individuals fail or are unable to take steps to remain cool and begin to experience increasing internal temperatures, they increase their risk of experiencing a range of potential adverse health outcomes.

Table 2.1 lists some of the medical conditions directly attributable to excessive heat exposure, along with recommended responses.

EHE conditions can result in increases in the number of cases of other health problems as well. For example, EHEs can increase the number of patients experiencing circulatory system conditions. These additional problems come from the added strain on the heart, increasing circulation to regulate internal temperatures, or to overcome the effects of dehydration, which thickens the blood, making it harder for the heart to pump.

Table 2.1. Medical conditions directly attributable to excessive heat exposure

Medical Condition	Symptoms	Responses
Heat cramps	Painful muscle cramps and spasms, usually in muscles of legs and abdomen. Heavy sweating.	Apply firm pressure on cramping muscles or gently massage to relieve spasm. Give sips of water; if nausea occurs, discontinue water intake. Consult with a clinician or physician if individual has fluid restrictions (e.g., dialysis patients).
Heat exhaustion	Heavy sweating, weakness, cool skin, pale, and clammy. Weak pulse. Normal temperature possible. Possible muscle cramps, dizziness, fainting, nausea, and vomiting.	Move individual out of sun, lay him or her down, and loosen clothing. Apply cool, wet cloths. Fan or move individual to air-conditioned room. Give sips of water; if nausea occurs, discontinue water intake. If vomiting continues, seek immediate medical attention. Consult with a clinician or physician if individual has fluid restrictions (e.g., dialysis patients).
Heat stroke (sunstroke)	Altered mental state. Possible throbbing headache, confusion, nausea, and dizziness. High body temperature (106°F or higher). Rapid and strong pulse. Possible unconsciousness. Skin may be hot and dry, or patient may be sweating. Sweating likely especially if patient was previously involved in vigorous activity.	Heat stroke is a severe medical emergency. Summon emergency medical assistance or get the individual to a hospital immediately. Delay can be fatal. Move individual to a cooler, preferably air-conditioned, environment. Reduce body temperature with a water mister and fan or sponging. Use air conditioners. Use fans if heat index temperatures are below the high 90s. Use extreme caution. Remove clothing. If temperature rises again, repeat process. Do not give fluids.

Sources: CDC, 2004a; Kunihiro and Foster, 2004; NWS, 2004.

2.3 Quantifying the Health Impacts of EHEs

Quantifying the health impacts of EHEs is complicated by the differences in quantification methods and a lack of accurate data.

The most conservative quantification method counts only outcomes on EHE days where the attribution information (e.g., primary diagnosis, cause of death) lists excessive weather-related heat exposure or a condition unequivocally associated with excessive heat exposure, such as heat stroke. This approach underestimates the health impacts of EHEs because not all the heat-related cases will include an attribution that recognizes this impact. More inclusive methods quantify EHE health impacts based on increases in outcomes during EHE periods compared to long-term averages. But such approaches can be absolute and attribute all observed increases in outcomes to EHEs, overestimating the heat-related mortality. Alternatively, the approach can be partial and attribute only a portion of the observed increase in outcomes to EHEs based on professional judgment or the results of additional analyses such as regression.

2.3.1 EHEs and U.S. mortality

There are a number of methods for estimating the public health threat and impact of EHEs. Since these methods can have a significant impact on the resulting estimate, it is important to recognize their differences when reviewing information describing the public health burden of EHEs.

The most conservative estimate of EHE mortality counts only cases in which exposure to excessive heat is reported on a death certificate as a primary or contributing factor. Using this approach, it was estimated that extreme heat from weather conditions is, on average, responsible annually for 182 deaths in the United States (CDC, 2002).

The conservative nature of this estimate due to the narrow criteria is recognized in the study itself (CDC, 2002). The accuracy of this estimate would improve with widespread adoption of revised criteria for attributing a death to excessive heat exposure. Typically, medical examiners list heat exposure as a primary or contributing cause of death only if the core body temperature exceeds 105°F. In the revised criteria, a death also can be classified as heat-related if the person is “found in an enclosed environment with a high ambient temperature without adequate cooling devices and the individual had been known to be alive at the onset of the heat wave” (Donoghue et al., 1997). Importantly, the National Association of Medical Examiners supports using these broader criteria, and medical examiners in several large cities (e.g., Philadelphia) have adopted them.

Alternative EHE mortality estimates come from analyses of daily urban summertime mortality patterns in the United States (Kalkstein and Greene, 1997; Davis et al., 2003a). These studies first defined EHE conditions and then calculated the number of EHE-attributable deaths based on differences in daily deaths on EHE days compared to longer-term averages. Although differences in the time series, definitions of urban populations, and other analytical methods prevent an exact comparison of results from Kalkstein and Greene (1997) and Davis et al. (2003a), their findings correspond closely [for details of the studies’ methods and the comparison of results see accompanying background technical report (Mills, 2005)]. Table 2.2 presents the estimates of heat-attributable excess deaths and mortality rates from these studies.

The results in Table 2.2 are notable for several reasons. First, despite differences in methods and the locations evaluated, the studies’ results fall in a narrow range of roughly 1,700-1,800 total heat-attributable deaths per summer. These estimates are roughly an order of magnitude greater than the comprehensive national annual average of 182 deaths with a listed cause of death of “excessive heat due to weather conditions” (CDC, 2002). This difference highlights the importance of the method (i.e., excess incidence or attributed outcomes) used to quantify EHEs’ health impacts. Although summing the results across different groups of locations minimizes some of the initial distinctions in the studies, some of the location-specific results in Table 2.2 show that significant differences can result from applying different methods to essentially the same mortality and meteorological data.

Second, both studies’ results show significant regional variation: EHEs have the greatest impact in the Northeast and Midwest and the least impact in the South and Southwest. This result is consistent with hypotheses that populations in the most vulnerable areas are not as acclimatized to elevated temperatures and that structures in less susceptible areas

Table 2.2 Estimates of heat-attributable deaths per summer and mortality rates in select U.S. metropolitan areas

Standard Metropolitan Statistical Area (SMSA)	Deaths ¹ (Estimated average summertime heat-attributable deaths from 1990 population)	Deaths ² (Estimated average summertime heat-attributable deaths from 1990 population)	Mortality Rate ¹ (Estimated heat-attributable deaths per 100,000, 1990s baseline)	Mortality Rate ² (Estimated heat-attributable deaths per 100,000, 1990s baseline)
Birmingham	42	N/A	5.00	N/A
Providence	47	N/A	4.14	N/A
Hartford	38	N/A	3.28	N/A
St. Louis	79	0	3.17	0.00
Kansas City	49	0	3.10	0.00
Buffalo	33	19	2.78	1.63
Indianapolis	36	N/A	2.61	N/A
Memphis	25	N/A	2.48	N/A
Columbus	33	N/A	2.45	N/A
Minneapolis	59	0	2.32	0.00
Chicago	191	193	2.32	2.34
Philadelphia	129	71	2.19	1.21
Denver	42	22	2.12	1.09
Detroit	110	124	2.12	2.39
Greensboro	22	0	2.10	0.00
Nassau, New York City, Newark	362	552	1.85	2.82
Louisville	17	N/A	1.79	N/A
Boston	96	56	1.76	1.03
Pittsburgh	39	40	1.63	1.69
New Orleans	20	30	1.56	2.31
Tampa	28	0	1.35	0.00
Baltimore; Washington, D.C.	84	40	1.25	0.59
Cleveland	29	23	1.01	0.80
Dallas	36	0	0.89	0.00
Atlanta	25	75	0.84	2.51
Cincinnati	14	0	0.77	0.00
Portland	9	32	0.50	1.76
Los Angeles and Riverside	72	216	0.50	1.50
San Francisco	28	138	0.45	2.21
San Antonio	4	N/A	0.30	N/A
Houston	7	0	0.19	0.00
Seattle	5	96	0.17	3.27
Jacksonville	0	N/A	0.00	N/A
Miami, Fort Lauderdale	0	0	0.00	0.00
Phoenix	0	6	0.00	0.30
Salt Lake City	0	N/A	0.00	N/A
San Diego	0	N/A	0.00	N/A
Norfolk	N/A	0	N/A	0.00
Charlotte	N/A	0	N/A	0.00
Total	1,810	1,733		

Note: N/A, not applicable, refers to a metropolitan area not examined in one of the studies.

1. Kalkstein and Greene, 1997.

2. Davis et al., 2003a.

are better designed to accommodate elevated temperatures. However, fewer locations were evaluated in the South and Southwest because of the studies' population selection criteria, so support for these hypotheses remains qualified. This regional result is more evident in *Figure 2.3*, which presents the Kalkstein and Greene (1997) results along with a similar result for Toronto (*N. Day, personal communication, Toronto Public Health, 2005*).

EHE-attributable mortality estimates from specific EHEs are also available:

- ▶ **Chicago, 1995, mid-July EHE:** The county coroner certified 465 heat-related deaths in Chicago (Cook County, Illinois) from July 11 to July 27, 1995 (*CDC, 1995*). More than 700 deaths in Chicago were eventually attributed to this EHE (*e.g., Palecki et al., 2001*). The difference reflects deaths directly attributed to heat by the medical examiner (*CDC, 1995*) and estimates of the total excess mortality attributable to the EHE based on studies of daily mortality patterns (*Palecki et al., 2001*).
- ▶ **Philadelphia, 1993, early-July EHE:** The county coroner certified 118 heat-related deaths in Philadelphia from July 6 to July 14, 1993 (*CDC, 1994*).

These estimates demonstrate that an EHE in the United States can easily be responsible for hundreds of deaths in a large metropolitan area.

2.3.2 EHEs and U.S. morbidity

EHE morbidity studies are relatively rare because of a lack of suitable daily time-series data. Further, when such studies are attempted, only the most severe morbidity outcomes (emergency room visits and hospitalizations) tend to be evaluated because of the limited number of locations where patients can be seen and be treated.

One of the few U.S. EHE morbidity studies examined Chicago hospital admissions during the July 1995 EHE. Semenza et al. (1999) calculated that this EHE was responsible for more than 1,000 hospital admissions, and anecdotal evidence strongly suggests that this EHE increased the incidence of Chicago emergency room visits. Specifically, the *Natural Disaster Survey Report: July 1995 Heat Wave* (NOAA, 1995) reported that on the second day of the EHE, only a few Chicago emergency rooms were directing ambulances to other facilities because of crowding (*i.e.*, operating in bypass status), but by the fourth day, 18 city emergency rooms were doing so.

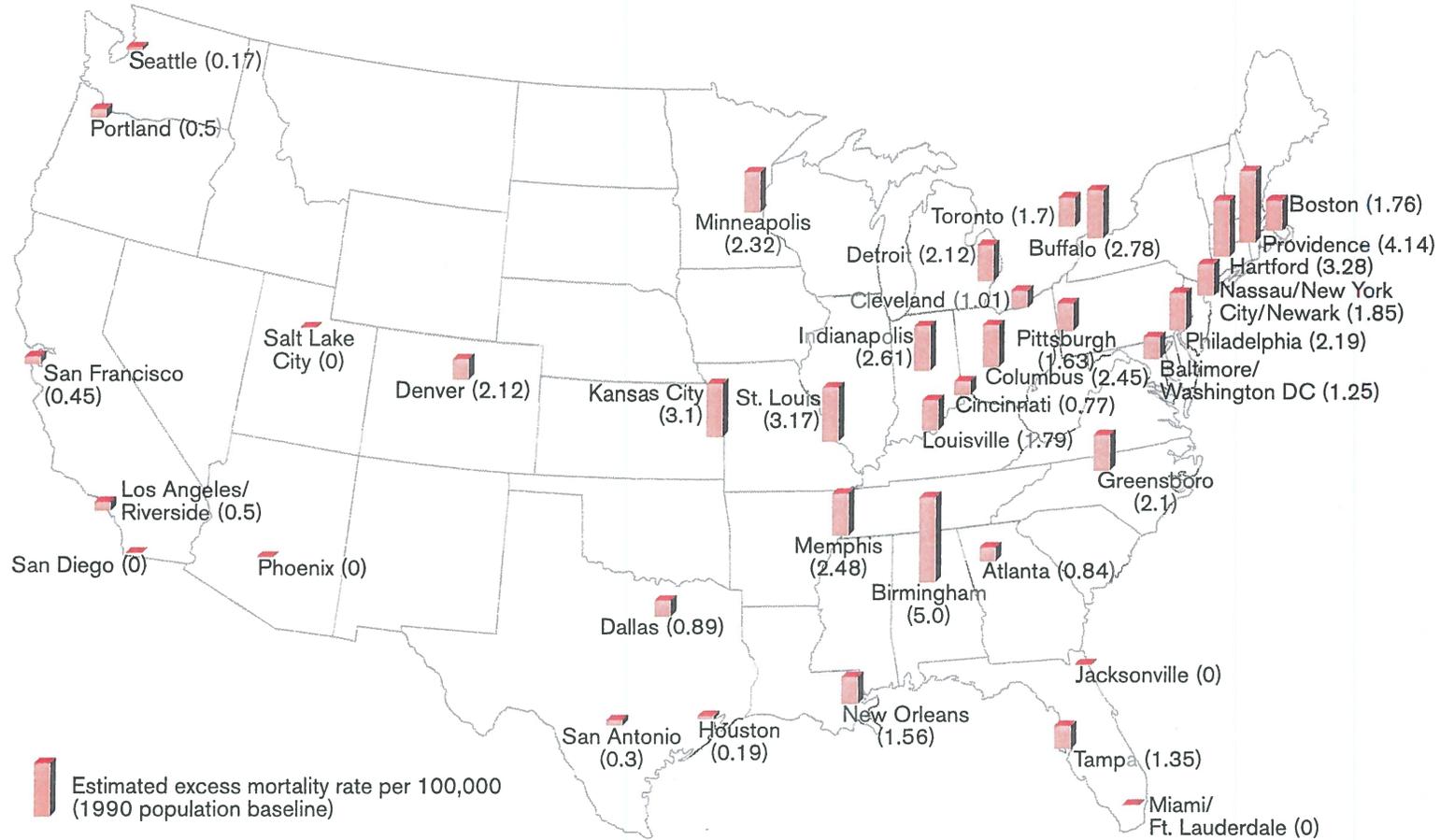


Figure 2.3. Estimated EHE-attributable mortality rates.

Note: Locations shown with a value of 0 may have deaths that are attributed to excessive heat exposure. This result simply means that there has not been a measurable increase in mortality from any cause during EHEs compared to other summertime periods.

Sources: Original mortality estimates from Kalkstein and Greene (1997). Converted to rates with the 1990 Census population estimates for the SMSAs. Toronto results from personal communication with N. Day, Toronto Public Health (2005).

In summary, available evidence suggests that EHEs increase morbidity incidence. More complete assessments of EHE impacts, including evaluations of EHE impacts on less severe outcomes, may require carefully designed retrospective surveys in affected populations.

2.4 Identifying Characteristics that Affect EHE Health Risks

Several factors can increase health risks during an EHE: the EHE's meteorological conditions, demographic characteristics, personal behavioral choices, and regional characteristics.

2.4.1 Meteorological conditions

When the weather gets hotter, the risk of losing control of one's internal temperature increases. Heat index tables such as the one in *Table 2.3* are commonly used to capture interactions among several meteorological variables to provide a measure of how hot it feels. Even heat index table results are sensitive, however, to the particular meteorological variables measured. For example, heat index results, including those in *Table 2.3*, often assume measurements are taken in a shaded location with light wind. As a result, most heat index tables also note that exposure to direct sunlight can increase heat index values by up to 15°F. These table notes may also state that exposure to hot dry winds can further increase health risks by promoting rapid dehydration, although a quantitative measure of these conditions' impact is not provided (*NWS Forecast Office, Pueblo, Colorado, 2004*). Ultimately, a change in any meteorological variable that increases heat index values or promotes dehydration will increase the individual's health risk.

EHE conditions represent a “shock” that can overwhelm typical responses to elevated temperatures. All else being equal, the shock value and the health risks increase the earlier in the summer the EHE occurs (*Kalkstein and Davis, 1989; Sheridan and Kalkstein, 1998*) because residents adapt, to some degree, to warmer summer conditions over the season. Similarly, health risks increase with the duration of the EHE measured as the number of consecutive EHE days (*Greene and Kalkstein, 1996*) and the amount of time spent above minimum temperature thresholds (*Kalkstein and Davis, 1989*).

Table 2.3. Heat index values (°F)^{3, 4}

Temperature (°F)	Relative Humidity (%)					
	90	80	70	60	50	40
80	85	84	82	81	80	79
85	101	96	92	90	86	84
90	121	113	105	99	94	90
95		133	122	113	105	98
100			142	129	118	109
105				148	133	121
110						135

3. Heat index values were not given for the temperature and relative humidity combinations that have blank cells.

4. Heat index values can be up to 15°F higher with exposure to direct sunlight. Heat index values assume calm wind conditions; hot dry winds can also increase heat index values.

Source: NWS Forecast Office, Pueblo, Colorado, 2004.

2.4.2 Demographic sensitivities

Individuals possessing any combination of the following characteristics or conditions are at greater risk for experiencing an EHE-attributable adverse health outcome:

- ▶ **Physical constraints:** It is difficult for some people to increase their circulation and perspiration during an EHE to help them remain cool. This at-risk group includes infants, older people (age 65 and older, who may also be less likely to recognize symptoms of excessive heat exposure), the obese, the bedridden, those with underlying medical conditions (e.g., heart disease, diabetes), those taking certain medications (e.g., for high blood pressure, depression, insomnia), and individuals under the influence of drugs or alcohol.
- ▶ **Mobility constraints:** People with mobility constraints are at higher risk during EHEs if the constraints limit their ability to access appropriately cooled locations. This group includes the very young and the bedridden.
- ▶ **Cognitive impairments:** People with mental illnesses, with cognitive disorders, or under the influence of drugs or alcohol may be unable to make rational decisions that would help limit their exposure to excessive heat or to recognize symptoms of excessive heat exposure.
- ▶ **Economic constraints:** The poor may be disproportionately at risk during EHEs if their homes lack air conditioning or they are less likely to use available air conditioning because of the cost (NWS, 2004). In addition, if the poor disproportionately reside in high crime areas, fear of crime can increase their risks by hindering their willingness to take appropriate responses [e.g., opening doors and windows for circulation, visiting cooling shelters (*American Medical Association Council on Scientific Affairs, 1997*)].
- ▶ **Social isolation:** Socially isolated individuals are less likely to recognize symptoms of excessive heat exposure. This can delay or prevent treatment and result in more serious health outcomes. Members of this group, which include the homeless and those living alone, may also be less willing or able to reach out to others for help.

2.4.3 Behavioral choices

In addition to demographic characteristics, the choices individuals make during an EHE can have a profound effect on the health risks they face. Examples of personal choices that can increase an individual's health risks during an EHE include the following (*American Medical Association Council on Scientific Affairs, 1997; CDC 2004a,c; NWS, 2004*):

- ▶ **Wearing inappropriate clothing:** Heavy, dark clothing can keep the body hot and limit cooling from evaporation of perspiration. Clothing that exposes skin to the sun increases the risk of sunburn, which limits the potential for evaporative cooling.
- ▶ **Failing to stay adequately hydrated:** During EHE conditions, we rely heavily on perspiration to regulate our body temperature. Without enough water consumption, perspiration will be inadequate or even cease and body temperature will rise.

- ▶ **Consuming alcohol:** Alcohol is a diuretic and thus limits perspiration. It can also impair judgment and result in excessive exposure to the elevated temperatures.
- ▶ **Engaging in outdoor activities:** Any activities that increase exposure to the sun or generate additional body heat (e.g., attending outdoor events, exercising, outdoor labor) increase the amount of body heat that must be dissipated.
- ▶ **Eating inappropriate meals:** Eating hot and heavy (e.g., high-protein) foods will increase the metabolic rate and increase the amount of body heat that must be dissipated.

2.4.4 Regional factors

Finally, regional characteristics can help determine an individual's health risks during EHEs. These characteristics include:

- ▶ **Geographic location:** Climate variability is largely a function of location, and increased variability has been associated with elevated heat-attributable mortality rates (*Chestnut et al., 1998*).
- ▶ **Urbanization and urban design:** As buildings, especially those with dark roofs, and dark paving materials replace vegetation in urban areas, the heat absorbed during the day increases and cooling from shade and evaporation of water from soil and leaves is lost. Urban areas can also have reduced air flow because of tall buildings, and increased amounts of waste heat generated from vehicles, factories, and air conditioners. These factors can contribute to the development of an urban heat island, which has higher daytime maximum temperatures and less nighttime cooling than surrounding rural areas (see *Figure 2.4*). Urban heat islands can increase health risks during EHEs by increasing the potential maximum temperature residents are exposed to and the length of time that they are exposed to elevated temperatures.
- ▶ **Residential location:** Residents on the upper floors of buildings will feel the effects of rising heat. This can elevate room temperatures and make it more difficult to maintain a consistent internal temperature if air conditioning is not available or is not used, or if ventilation is restricted.

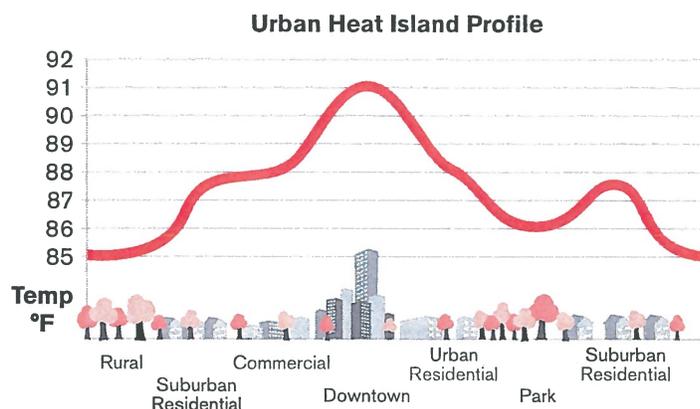


Figure 2.4. Impact of the urban heat island on ambient temperatures.

Source: U.S. EPA, 2006.

Table 2.4 summarizes the factors that increase the risk of an individual getting sick or dying from an EHE.

Table 2.4. Factors that increase an individual's risk of experiencing an EHE-attributable adverse health outcome

Meteorological Characteristics

- ▶ Increased temperature
- ▶ Increased relative humidity
- ▶ Dry, hot winds

Demographic Characteristics

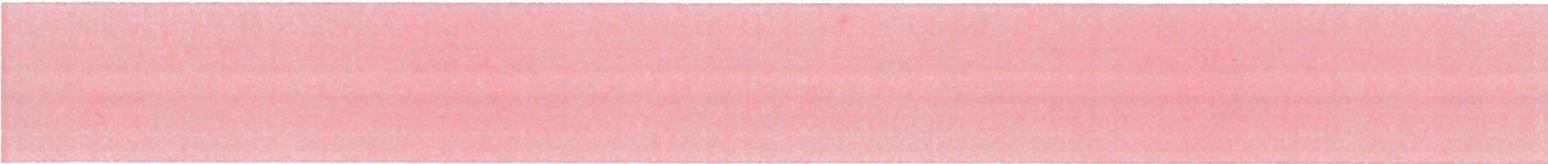
- ▶ Physical constraints (including underlying medical conditions)
- ▶ Mobility constraints
- ▶ Cognitive impairments
- ▶ Economic constraints
- ▶ Social isolation

Behavioral Choices

- ▶ Wearing inappropriate clothing
- ▶ Failing to stay adequately hydrated
- ▶ Consuming alcohol
- ▶ Engaging in outdoor activities
- ▶ Eating heavy and/or hot foods

Regional Characteristics

- ▶ Living in an area with a variable climate
- ▶ Living in an urban area
- ▶ Living on the upper floors of buildings



3 Summary of Current EHE Notification & Response Programs

Effective EHE notification and response programs draw on available local resources and recognize local constraints to minimize increases in morbidity and mortality during EHEs. As a result, effective EHE notification and response programs can vary.

This chapter summarizes the current range of observed response actions to EHE conditions. Not all of these actions will be feasible or appropriate for every location. This summary is intended to provide parties wanting to develop or enhance an EHE notification and response program with a “menu” of possible actions to consider.

This summary has a number of caveats. First, the reviewed EHE programs were selected to provide an illustrative rather than all-inclusive set of notification and response actions. As a result, specific actions that are important components of other effective EHE programs may have been omitted. Second, our exclusion of specific actions in this summary is not a judgment on their potential benefit. In fact, developing and evaluating notification and response actions in response to local conditions is strongly encouraged.

This chapter first summarizes actions incorporated in the EHE programs we reviewed. This is followed by narratives that offer insight into how and why the reviewed programs were developed, and summarize critical lessons their administrators have learned over time. The chapter also describes several short-term responses that the city of Phoenix, Arizona, implemented during the EHE in the southwestern and central United States in July 2005. These Phoenix responses are included to highlight actions that can be taken with relatively short notice to address exceptional EHEs even if a formal EHE program has not been developed. Finally, the chapter reviews evidence from studies that have attempted to quantify the impact of EHE notification and response programs. Although limited, such studies provide some perspective on the potential benefits of EHE notification and response programs.

3.1 Elements in Select EHE Programs

On the following page, *Table 3.1* summarizes the actions Philadelphia and Toronto incorporated in their EHE notification and response programs. These programs were selected because they are widely recognized as benchmarks for those considering developing a comprehensive EHE program.

Following *Table 3.1*, the individual elements are described in greater detail.

Table 3.1. Summary of confirmed EHE program elements in Philadelphia and Toronto

Program elements	Philadelphia ⁵	Toronto ⁶
Prediction see 3.1.1, p. 23 ►		
Ensure access to weather forecasts capable of predicting EHE conditions 1-5 days in advance	✓	✓
Risk assessment see 3.1.2, p. 23 ►		
Coordinate transfer and evaluation of weather forecasts by EHE program personnel	✓	✓
Develop quantitative estimates of the EHE's potential health impact	✓	✓
Use the broader criteria to identify heat-attributable deaths	✓	✓
Develop information on high-risk individuals	✓	
Develop an accessible record on facilities and locations with concentrations of high-risk individuals	✓	✓
Notification and response see 3.1.3, p. 24 ►		
Coordinate public broadcasts of information about the anticipated timing, severity, and duration of EHE conditions and availability and hours of any public cooling centers	✓	✓
Coordinate public distribution and broadcast of heat exposure symptoms and tips on how to stay cool during an EHE	✓	✓
Operate informational phone lines that can be used to report heat-related health concerns	✓	✓
Designate public buildings or specific private buildings with air conditioning as public cooling shelters and provide transportation	✓	✓
Extend hours of operation at community centers with air conditioning	✓	
Arrange for extra staffing of emergency support services	✓	
Directly contact and evaluate the environmental conditions and health status of known high-risk individuals and locations likely to have concentrations of these individuals	✓	✓
Increase outreach efforts to the homeless and establish provisions for their protective removal to cooling shelters	✓	✓
Suspend utility shutoffs	✓	✓
Reschedule public events to avoid large outdoor gatherings when possible	✓	
Mitigation see 3.1.4, p. 26 ►		
Develop and promote actions to reduce effects of urban heat islands		Not evaluated

5. NOAA, 1995; Kalkstein, 2002.

6. Kalkstein, 2002; personal communications, M. Vittiglio and N. Day, Toronto Public Health, 2005.

3.1.1 EHE prediction

► Ensure access to weather forecasts capable of predicting EHE conditions 1-5 days in advance

Forecasting the development and characteristics of an EHE is a critical element of both EHE risk assessment and notification and response activities. In the United States, NWS forecasts provide national coverage, so any location could incorporate this element into an EHE program. Toronto and Philadelphia both use a sophisticated, air mass-based heat health system developed by the Center for Climatic Research at the University of Delaware to evaluate meteorological forecast data in terms of the potential to increase the number of daily deaths above average levels (*Sheridan and Kalkstein, 2004*).

3.1.2 EHE risk assessment

► Coordinate transfer and evaluation of weather forecasts by EHE program personnel

In some locations, EHE program personnel may need to review forecast data to determine whether location-specific criteria for EHE conditions are satisfied and, potentially, how the forecast conditions match with any established EHE severity criteria. Establishing forecast transfer and evaluation protocols involves specifying under what conditions forecasters (e.g., the NWS) forward information to local officials (and confirm receipt) and identifying who within the EHE program reviews and evaluates the information. Alternatively, electronic systems can be established to retrieve and review forecast data from meteorologists and notify EHE program personnel if certain criteria are satisfied.

► Develop quantitative estimates of the EHE's potential health impacts

Several locations with EHE notification and response programs, including Philadelphia and Toronto, have integrated heat health watch/warning systems that use meteorological forecast data as inputs to health impact models, which identify when forecast conditions could result in excess mortality and then estimate the potential number or probability of heat-attributable deaths (*Sheridan and Kalkstein, 2004*). These quantitative health impact estimates are then used in both cities to determine if and what type of heat emergency is declared. These determinations affect the type and scope of notification and response activities that will be implemented.

► Use the broader criteria to identify heat-attributable deaths

Medical examiners can use the criteria in Donoghue et al. (1997) to define heat-attributable deaths and to provide the public with more accurate reporting of an EHE's health impacts. This information can increase public awareness and appreciation of the health risks of the conditions, which may improve compliance with recommended actions.

► Develop information on high-risk individuals

Recognizing that some individuals have an elevated risk facilitates notifying and responding to these individuals (e.g., older individuals, the homeless) to achieve the greatest public health benefit for a given resource commitment. Easily accessible contact information for these individuals during an EHE can help the program

prioritize assessment and intervention efforts. In some locations such as Chicago, the development of information on high-risk individuals has been expanded beyond persons known to public agencies. It includes people and organizations who can identify high-risk individuals so they can be a part of any active assessment and intervention program efforts.

▶ **Develop an accessible record of facilities and locations with concentrations of high-risk individuals**

A database or list of high-risk facilities and locations would complement a list of high-risk individuals. This list could help prioritize active assessment efforts during an EHE (e.g., visiting retirement homes) to coordinate EHE notification activities through combinations of fax, email, or telephone contact trees. For example, in Toronto, more than 800 community agencies are notified of EHE conditions through a fax/call-out tree.

3.1.3 EHE notification and response

Coordinate public broadcasts of information about the anticipated timing, severity, and duration of EHE conditions, and availability and hours of any public cooling centers

Effective public notification of forecast EHE conditions helps eliminate the risk of an EHE taking a population by surprise. More specifically, notifying the public of anticipated EHE conditions will enable many residents to prepare and will enable public assessment and intervention actions to concentrate on known high-risk individuals and locations. Likewise, advance public notification about the availability of cooling centers will increase the likelihood that at-risk individuals can take advantage of these services.

▶ **Coordinate public distribution and broadcast of heat exposure symptoms and tips on how to stay cool during EHEs**

Publicly broadcasting cooling tips and symptoms of excessive heat exposure will complement similar broadcasts about forecast EHE conditions and help residents develop appropriate EHE responses (e.g., seek air-conditioned locations, minimize direct sun exposure, reschedule outdoor gatherings). When possible, this action would include providing this information before and throughout the summer to public meeting areas (e.g., churches, recreation centers, libraries, schools), arranging periodic broadcasts through available media, and developing EHE Internet sites.

▶ **Operate informational phone lines that can be used to report heat-related health concerns**

Telephone help lines give real-time advice and information that can help people stay safe and avoid serious outcomes. This phone system either can be activated when an EHE is forecast (e.g., Philadelphia's or Toronto's Heat Lines), or can be a more general, full-time system (e.g., a 311 line) staffed during EHEs by personnel with the information and ability to access and direct other intervention resources (e.g., emergency medical staff) as needed.

▶ **Designate public buildings or specific private buildings with air conditioning (e.g., shopping malls, movie theaters) as public cooling shelters and provide transportation if necessary**

Spending time in an air-conditioned environment during an EHE is one of the most effective means of reducing one's risk of overheating. By designating specific public buildings with air conditioning as cooling shelters, and by providing information on large private buildings with air conditioning where the public can freely congregate (e.g., shopping malls and movie theaters), local officials can increase the awareness and use of these resources to minimize an EHE's health impacts. Providing free public transportation to those locations during an EHE also recognizes that many with the greatest need for the shelters may have limited access to personal transportation and limited financial resources.

▶ **Extend hours of operation at community centers with air conditioning**

Many of those at greatest risk during an EHE may already frequently visit specific air-conditioned public locations (e.g., child care and senior centers). Extending the hours of operation at these and other public locations with air conditioning during EHEs increases the opportunity for high-risk individuals to spend time in an air-conditioned environment.

▶ **Arrange for extra staffing of emergency support services**

EHEs will place additional burdens on emergency medical and social support services through increased activity focused on preventing adverse health outcomes and increased need for medical services. Increasing the staffing of emergency medical and social support services in response to an EHE forecast increases the opportunity to avert some outcomes with intervention and assessment activities or at least have them addressed at an earlier and less severe stage by preventing the emergency medical system from becoming overwhelmed.

▶ **Directly contact and evaluate the environmental conditions and health status of known high-risk individuals and locations likely to have concentrations of these individuals**

High-risk individuals need to be contacted directly and, preferably, observed several times a day during EHEs to ensure that cooling tips are being followed (e.g., fluids are being consumed, appropriate clothing is being worn) and that any symptoms of overexposure are recognized and alleviated as early as possible. This labor-intensive action is offset by a reduction in the number and severity of adverse health outcomes among the high-risk population. The individuals to be contacted and locations to be visited would be identified in the risk assessment component of the EHE program (*see Section 3.1.2*).

▶ **Increase outreach efforts to the homeless and establish provisions for their protective removal to cooling shelters**

The homeless are vulnerable during EHEs, so additional effort must be devoted to homeless outreach and evaluation during an EHE, especially during the day. This increased outreach effort should be supported by authorization for officials to move individuals believed to be experiencing medical difficulties or at extreme risk to cooling shelters for observation and treatment.

▶ **Suspend utility shutoffs**

Suspending utility service during an EHE could significantly increase the risk of exposure to elevated temperatures. As a result, many local governments require local utilities to suspend shutoffs during EHEs if they do not already have their own shutoff suspension guidelines. However, suspending utility shutoffs during an EHE does not ensure that at-risk individuals with access to air conditioning will use it.

▶ **Reschedule public events to avoid large outdoor gatherings, when possible**

When an EHE is forecast, there are likely to be previously scheduled outdoor activities involving large gatherings of individuals (e.g., youth league games, outdoor camps, concerts). If these activities take place as scheduled, many people may experience significant heat exposure. To the extent that local officials have control over how these events proceed (e.g., through permits or use of facilities), efforts should be made to reschedule the event or, when rescheduling is not feasible, require more medical staff and “cool zones” for attendees.

3.1.4 EHE mitigation

▶ **Develop and promote actions to reduce effects of urban heat islands**

Urban heat islands can increase daytime temperatures and limit nighttime cooling. This can increase the severity and duration of urban residents’ exposure to high-heat conditions and increase their risk for experiencing a heat-attributable adverse health outcome. Programs and actions that increase urban vegetation and the reflectiveness of urban surfaces help address this problem.

3.2 Case Studies in the Development and Implementation of EHE Programs

This section uses case studies from Philadelphia, Toronto, and Phoenix to show how different forces can drive the development and implementation of EHE notification and response programs and summarizes the lessons learned over time in these locations. These insights are especially useful because these programs cover a broad geographic spectrum and reflect varying degrees of active program coordination.

3.2.1 Philadelphia

Overview

Philadelphia’s EHE notification and response program is often viewed as a benchmark for integrated, urban EHE programs. Philadelphia has a long history of EHE impacts, with references to heat-attributable deaths recorded since colonial times. The development of this program demonstrates how an exceptional meteorological event can combine with seemingly minor bureaucratic adjustments to create significant public interest and support for an EHE notification and response program.

This EHE program’s development also demonstrates the importance of institutional support and shows how response actions can be matched to program partners based on their areas of expertise. Finally, the program highlights the benefits of incorporating a system for active program review and adjustment to respond to needs, constraints, and opportunities as they arise.

Development of Philadelphia's EHE program

Philadelphia's EHE notification and response program is a direct response to observable public health impacts from specific EHEs combined with the public recognition of these risks and institutional support to develop an effective response to avoid similar outcomes in the future.

In the summer of 1991, more than 20 deaths in Philadelphia were attributed to excessive heat exposure. In response, the city established and began to convene meetings of a Heat Task Force under the direction of Health Department staff. The Health Department identified original task force participants by informally assessing public and private organizations that served at-risk individuals during an EHE or provided Philadelphia with critical infrastructure and medical services (e.g., electric and water utilities and emergency medical service providers).

The Heat Task Force continued to meet through the spring of 1993, but had made little progress in developing what would be recognized as an EHE notification and response program. Then, from July 4 to July 14, 1993, Philadelphia experienced EHE conditions characterized by minimum daily high temperatures of at least 90°F. By July 6, the risks were apparent and publicly recognized as the city health commissioner announced that people were dying because of EHE conditions.

At the same time, informal discussions between Health Department staff and Southeastern Pennsylvania Red Cross board members led to the establishment of the *Heatline*, a telephone hotline, to handle calls from residents with heat-related questions and concerns. The *Heatline*, which represented the extent of the city's direct response actions to the EHE, operated for five days, and its number was widely reported by local media.

Perhaps the most critical aspect of the July EHE, in terms of its contribution to the development of the current EHE program, was that the city medical examiner broke from requiring a core body temperature in excess of 105°F for listing a death as heat related. Instead, deaths were listed as heat related if the core temperature criterion was satisfied or if a body was "found in an enclosed environment with a high ambient temperature without adequate cooling devices and the individual had been known to be alive at the onset of the heat wave" (Donoghue et al., 1997).

This change resulted in the medical examiner classifying 105 deaths during the July 1993 EHE as heat related. In contrast, for all of July, New York City and Washington, D.C., which had experienced similar meteorological conditions, reported three and two heat-related deaths, respectively, using solely the core temperature criterion.

This finding and its public reporting made the impact of excessive heat in Philadelphia a topic of considerable local and national media interest, including references to Philadelphia as the "Heat Death capital of the world." In addition, the contrast between the number of heat-related deaths reported in Philadelphia and the totals from surrounding counties and other urban centers led to a request by state and other officials for a CDC investigation into the appropriateness of the coding criterion the Philadelphia medical examiner used. The resulting investigation ultimately concluded that the criterion was appropriate and the associated estimates of heat-attributable mortality were accurate.

Following the CDC investigation, and with increased public attention on the health risks of EHE conditions, staff at Philadelphia's Health Department became aware of work under the direction of Dr. Laurence Kalkstein of the University of Delaware to develop a system that would identify weather conditions expected to increase daily mortality. Ultimately, this interest led to the development by the summer of 1995 of a computerized system capable of forecasting EHE conditions up to two days in advance.

Over this period, spurred by the events of 1993, the Philadelphia Heat Task Force began preparing EHE response plans that identified lead agencies, secured formal commitments of support from relevant departments, and worked on developing a system for integrated communications between program participants.

As the July 1995 EHE developed in the Midwest and the scope of its health impact began to emerge (eventually more than 700 deaths in Chicago would be classified as heat related), the Philadelphia Hot Weather-Health Watch/Warning System was announced at a meeting with EPA and Philadelphia Health Department officials. This system was initially implemented as the EHE moved eastward into Philadelphia.

Philadelphia's Hot Weather-Health Watch/Warning System response actions

Philadelphia's initial EHE program implemented combinations of the following actions depending on the predicted severity of the EHE (NOAA, 1995; Kalkstein *et al.*, 1996):

- ▶ **Media announcements:** Local news media were notified of any EHE notification made by the health commissioner. Media were also given background information on how to minimize exposure to heat during the event and encouraged to broadcast it as part of any heat-related stories.
- ▶ **Buddy system advocacy:** Media messages included recommendations for friends, relatives, neighbors, and block captains (see discussion below) to check on local high-risk residents (e.g., sick and older individuals) throughout the day during the event.
- ▶ **Hotline activation:** The same phone system staffed by the Red Cross that was developed for the 1993 EHE was part of the formal program rollout.
- ▶ **Home visits by Health Department staff** (currently a county sanitarian and nurse make up each field team): Individuals were identified from calls received on the Hotline.
- ▶ **Halt to service shutoffs:** Agreements were reached with the respective utilities that electrical and water service would not be shut off for nonpayment during periods for which the Health Department issued a high heat warning.
- ▶ **Increased emergency medical service staffing:** Increased numbers of staff with the city's Fire Department and Emergency Medical Services were on duty for the duration of the high heat period.
- ▶ **Increased outreach to the homeless:** Activities that involved identifying homeless individuals and providing shelter were extended to daytime hours to minimize their exposure to the most severe conditions.

- ▶ **Cooling shelters/senior refuge:** Hours of operation at air-conditioned senior centers were extended to provide a refuge for those otherwise lacking access to air conditioning.
- ▶ **Outreach:** The Heatline phone number was displayed on the Crown Lights display in downtown Philadelphia (an electronic billboard on top of the Philadelphia Electric Company building that is visible over a large area).

Two notable aspects of the Philadelphia Watch/Warning System that warrant additional discussion are its use of block captains and its use of field assessment teams from the Health Department to evaluate high-risk individuals during EHEs.

Philadelphia's block captains are a critical point of interaction between the public and the Health Department during EHEs. Block captains are volunteers elected by residents of their block to help coordinate neighborhood improvement projects with the city. Philadelphia currently has about 5,000 block captains. They can both identify and evaluate the health status of high-risk and hard-to-reach individuals in their residential area during an EHE. Although block captains are not required to contact specific individuals during a declared EHE, anecdotal evidence suggests that many do. Their actions most likely benefit others and, during declared heat events, news crews frequently record and broadcast block captains checking on the status of high-risk individuals in their area, spreading the message to check on those at risk.

The second notable aspect of Philadelphia's program is its coordinated use of field teams composed of city Health Department staff in follow-up visits to at-risk individuals identified from *Heatline* calls. Teams assembled during a declared heat event currently consist of a sanitarian and a nurse who have been temporarily reassigned from their typical duties. This reallocation of staff reflects a belief that a more immediate and more significant public health risk is being addressed.

Adjustments and lessons learned

Since 1995, a number of relatively minor changes have been made in the response elements of Philadelphia's EHE program, including the following:

- ▶ Transferring the *Heatline's* operation from the Red Cross to the Philadelphia Corporation for Aging (PCA) and using the PCA's *Senior Line* number to double as the *Heatline*. When EHEs are announced, the hours of operation for the *Senior Line/Heatline* are expanded from between 8 a.m. and 5 p.m. to between 8 a.m. and midnight.
- ▶ Adding nurses to the on-call *Heatline* staff to handle calls with specific medical questions.
- ▶ Mailing heat information to block captains to distribute in their areas.
- ▶ Increasing the forecast period for the spatial synoptic classification (SSC)-based Heat Health Watch Warning System from 2.5 days (60 hours) to 5.0 days (120 hours).

Philadelphia's experience demonstrates the importance of public recognition of EHE health risks and of continued support from upper levels of government for developing an EHE notification and response program. The city's program also shows that matching responsibilities of program elements with program partners who already perform similar tasks is critical for achieving a wide range of response actions. Specific examples of this matching in the Philadelphia program include shifting the *Heatline* from the Red Cross to the PCA, staffing field teams with temporarily reassigned Health Department personnel, and incorporating the city's existing block captain program to create a community-based buddy system capable of evaluating the status of high-risk individuals.

3.2.2 Toronto

Overview

Toronto is one of several North American locations with an EHE notification and response program that is driven by calculations of potential excess mortality or mortality probability based on forecast meteorological conditions. Toronto Public Health's EHE program uses these results to determine when heat warnings should be issued and what type of message to communicate.

Toronto's EHE program is of special interest because it evolved primarily as a proactive, precautionary response to a perceived public health risk by local politicians. This is in contrast to most of the other highly active and integrated programs, which typically originated as responses to EHEs that triggered recognizable increases in daily mortality and morbidity. In addition, Toronto's program is an example of how an effective program can be developed by drawing general lessons from other locations and tailoring implementation to respond to local opportunities and challenges. Finally, the routine, structured process of performance review, needs assessment, and adjustment of the Toronto EHE program is noteworthy.

Development of the Toronto EHE program

The origins of Toronto's EHE program can be traced to 1998 and the Mayor's Task Force on Homelessness. This effort established a lead role for Toronto Public Health to identify and develop responses to the health issues faced by the city's homeless. In the spring of 1999, the Task Group asked Toronto Public Health to establish temperature thresholds that would be used to initiate health alerts and trigger additional homeless interventions (e.g., increasing daytime staff and efforts to get the homeless indoors).

To address this task, Toronto Public Health staff reviewed information from several EHE programs in the United States, including those in Philadelphia and Chicago. This review increased awareness of the demographic and physical characteristics that increase EHE vulnerability and highlighted the potential for an effective EHE program. Most importantly, this review increased awareness among officials that, although the homeless were especially vulnerable to EHE conditions, the presence of other high-risk subpopulations meant that EHEs should be recognized as a much larger threat to public health.

Development of an EHE prediction system similar to the one used in Philadelphia and several other U.S. cities began in 2000. The Toronto prediction system was completed and became active on June 18, 2001, in time to assist in forecasting the EHE that occurred in August of that year. Initial program elements focused on issuing a media release any time EHE conditions were forecast that contained information about the health risks of the conditions and appropriate responses. These announcements were also used to trigger increased intervention activities directed at the homeless population.

With the program's development, Toronto Public Health also established a Hot Weather Response Committee to develop, monitor, and update its Hot Weather Response Plan. The committee is a partnership of representatives from various city departments and agencies working with potentially vulnerable populations. Every year, before the hot season, the committee discusses and finalizes the contributions and roles each agency will assume during the coming summer. Using a call-out tree, Toronto Public Health coordinates the plan and notifies the committee and a list of more than 800 agencies of an EHE. Each agency and city department implements its part of the plan.

Adjustments and lessons learned

In the fall of each year, the Hot Weather Response Committee meets to assess the performance of the system and program. The focus of this meeting is on identifying areas and items that could be added or improved to enhance the program's performance. This active review process has resulted in these changes to the program:

- ▶ Having the Red Cross operate an informational heat-health telephone line during declared heat advisories
- ▶ Coordinating the city's emergency medical service (EMS) with the health line to address specific medical questions, conduct follow-up visits with all callers to evaluate conditions in their residences, and to take individuals to cooling centers when needed
- ▶ Providing functional drinking water fountains in city parks
- ▶ Extending the hours of operation of city pools
- ▶ Providing transit tokens to those who have been evaluated by street patrol teams and are found to be in need of a cooling center.

Less formal program adjustments over time have included coordinating with other city officials to evaluate and, when necessary, relax enforcement of certain ordinances to allow compliance with cooling tips provided during EHEs. For example, the city relaxes enforcement of late-night park closure rules, because many residents who lack air conditioning visit Toronto's parks at night during EHE conditions.

Finally, a critical component of the Toronto EHE program has involved working to increase public education and awareness of EHEs and their health risks. To this end, Toronto Public Health holds an annual media event in mid-May at which Health Department, Red Cross, and EMS staff members are available to answer EHE questions from the media.

3.2.3 Phoenix

Summer in Phoenix is, by any measure, hot. Daily high temperatures above 100°F are routine, temperatures up to 110°F are common, and temperatures above 120°F are possible. Although residents over time physically adapt to some extent to Phoenix's high heat, summer conditions can still be quite variable. Despite Phoenix routinely experiencing life-threatening summertime temperatures, studies of excess heat mortality there have consistently found little evidence of any major heat-attributable excess mortality impacts (e.g., Kalkstein and Greene, 1997; Davis et al., 2003a,b).⁷

Although definitive explanations for this result cannot yet be offered, it seems likely that this can be attributed to significant local experience in responding to elevated temperatures, relatively low humidity, extensive access to air conditioning, widespread public recognition of the health risks during EHE conditions, and a willingness to make appropriate adjustments to minimize heat exposure. These findings suggest the importance of having a public that understands the health risks inherent in EHEs and knows how to minimize their health impacts.

Still, in mid-July 2005, much of the southwestern and central United States experienced consecutive days of hot weather that broke all-time high temperature records in many locations. During this period, Phoenix was a focus of media attention because of the duration of the conditions (all but 3 days in the 2-week period through July 21 reached 110°F) and because several deaths were attributed to the heat (*Associated Press*, 2005). Extreme high temperatures like those experienced in July 2005, however, create potentially life-threatening conditions for anyone experiencing unmitigated exposure, regardless of adaptation. As a result, it is not surprising that the majority of deaths in Phoenix attributed to the heat were of homeless individuals. Phoenix's sudden increase in heat-attributable deaths in July 2005 should be viewed as a reflection of how an exceptionally severe and long-lasting EHE can overwhelm even highly adapted populations.

Before the 2005 summer, Phoenix's EHE program consisted mainly of relying on the local NWS forecast office to predict dangerous conditions and the local media to broadcast warnings and advice for limiting heat exposure. Although Phoenix is covered by an operating SSC-based EHE prediction system, developed with funding by NOAA's NWS and the local electrical utility to help guide utility shutoff decisions, there was minimal interest in incorporating this available information into a broader EHE notification and response program.

Adjustments and lessons learned

Phoenix's public response to the July 2005 EHE conditions largely focused on opening homeless shelters during daytime hours, bringing homeless individuals to these and other locations with air conditioning, and providing donated bottled water. Given the general prevalence of air conditioning in Phoenix, this targeted action may be the most effective approach for limiting the health risks and impacts of an especially severe EHE.

⁷ A lack of evidence of a heat-mortality relationship in these studies does not mean that excessive heat is not reported as a contributing factor in deaths in Phoenix during the summer; in fact, heat-related deaths are routinely reported. This finding simply means there has not previously been a measurable increase in all-cause mortality rates in Phoenix when the heat reaches exceptional levels.

This action also demonstrates how a location that generally lacks a formal EHE program can take immediate steps to reduce the risks and health impacts of an especially severe EHE.

In addition, the July 2005 EHE in Phoenix triggered a review of the county's response plans to EHE warnings issued by the local NWS office. Although this review is ongoing, the revised plan is expected to clearly define a set of actions the county will take after an NWS announcement.

3.3 Evidence on the Performance of EHE Programs

Few studies have evaluated the efficacy of EHE notification and response programs. This reflects the difficulty of developing these studies (e.g., issues in identifying case and control locations and accounting for variation in populations and EHE conditions) and, in many cases, the brevity of existing operating EHE programs.

One study in Philadelphia (*Ebi et al., 2004*) used regression analysis to quantify the impact of publicly announcing forecast EHE conditions on EHE-attributable excess mortality from 1995 to 1998. This study was possible largely because, at the time, the city and the regional NWS forecast office independently evaluated forecast data for anticipated EHE conditions. As a result, during this period there were days when the city's criteria called for an EHE warning but the NWS would not issue one, days when the city's system would suggest a warning be issued and the NWS would issue one, and days when the NWS would issue a warning when the city's system did not call for a warning.

Ebi et al. (2004) found that for each day Philadelphia issued an EHE warning based on the SSC system recommendation, expected mortality was reduced by roughly 2.6 lives per day and this mortality reduction was experienced for the 3 days following the last issued heat warning. This result was statistically significant at the 8% level, which the authors note is equivalent to saying there was a 92% chance that the system saved at least one life during this period. It is estimated that the system saved 117 lives during the study period. To place this result in a cost-benefit framework, the authors report an estimated cost, primarily for wages of extra emergency medical staff, of \$10,000 for each day a heat advisory is issued. In contrast, EPA routinely assumed a value per avoided statistical life year lost of \$6 million in regulatory impact assessments at the time of the study.

The other formal study that examined the effectiveness of EHE programs, *Palecki et al. (2001)*, compared the health impacts of EHEs in 1995 and 1999 in Chicago and St. Louis. The basis for evaluating the effectiveness of EHE programs in this study is provided mainly by the contrast of the impacts of the events in Chicago, which lacked an EHE notification and response program in 1995 but then developed one, which became active in 1999. The authors take care to note that there were differences in the duration, intensity, and meteorological conditions preceding the two EHEs, but they focus primarily on the fact that 700 deaths were attributed to the 1995 EHE in Chicago compared to roughly 100 deaths from the 1999 event. The authors then argue that much of this sharp reduction in mortality can be attributed to the effectiveness of Chicago's EHE program, which, among other actions, included reminding the public of the toll the 1995 EHE had taken to convey the risks of the 1999 conditions.

Additional anecdotal evidence from Philadelphia supports the contention that the city's EHE program has had a beneficial public health impact. Specifically, although more than 100 deaths in Philadelphia were attributed to the July 1993 EHE, the 1995 EHE experienced in the city resulted in only 60-70 heat-attributable deaths after the city's EHE program was implemented that summer [*personal communication, Jerry Libby, Philadelphia Health Promotion Department (retired), September 27, 2005*]. This reduced mortality is even more notable given the higher temperatures and longer duration of the 1995 event.

These results provide limited quantitative evidence that EHE notification and response programs can demonstrably improve public health.

4 Summary Recommendations for EHE Notification & Response Programs

A central theme of this guidebook is the importance of accounting for local conditions and populations when defining EHE conditions and developing and implementing EHE notification and response programs. Despite the recognized difficulty of addressing all combinations of program needs, opportunities, and constraints that users of this guidebook may encounter, general recommendations that draw on available data, research results, and experience with EHE programs can be made.

The foundation for these recommendations is the recognition that EHEs are but one of a much larger group of extreme meteorological events (e.g., blizzards, floods, hurricanes, tornadoes) and anthropogenic conditions (i.e., urban smog) that can adversely affect public health. These recommendations are organized according to data needs and actions that we believe an EHE notification and response program must address to provide public health benefits. Specifically, the recommendations are organized into the following general areas: EHE definition and forecasting, public education and awareness of EHE risk factors and health impacts, EHE response preparation, EHE response actions, and EHE program review and evolution.

Each area has two categories of recommendations. Strongly recommended actions address information or actions we believe an EHE notification and response program must address to help minimize heat-attributable public health impacts. The second category of recommendations offers guidance on additional actions or data development that could enhance the public health effectiveness of an EHE program once the program has addressed the strongly recommended actions.

4.1 EHE Definition and Forecasting

As with notification and response programs for other extreme meteorological events, the effectiveness of an EHE notification and response program will initially be constrained by its ability to define and accurately forecast the relevant meteorological conditions. The recommendations in this section are intended to ensure timely access to locally relevant EHE forecast information.

4.1.1 EHE criteria must reflect local conditions

Many established meteorological criteria are used to determine whether forecast or existing conditions can be labeled as a certain type of extreme meteorological event (e.g., using maximum sustained wind speeds to identify and categorize hurricane conditions). A distinguishing feature for most of these criteria is that they do not vary by location.

In contrast, this guidebook's Technical Working Group (TWG) strongly recommends that EHE criteria be defined based on a review of local meteorological data. For example, a criterion that defines anticipated EHE conditions on all days with a forecast maximum temperature of 100°F or greater would not be useful in locations where this temperature has never been observed or in areas where such temperatures are common. In contrast, a criterion that announces anticipated EHE conditions any time the forecast daily maximum temperature is greater than the 95th percentile value for that day from the past 30 years would allow for variation by location.

Incorporating evidence of heat-attributable adverse health impacts from analyses of health outcomes and weather conditions can enhance EHE criteria development. Thus analyses of historical meteorological conditions should incorporate available health outcome data (e.g., regression-based analyses of daily mortality as a function of meteorological variables or air masses). Adding additional control variables that have been identified as affecting the number of heat-attributable health outcomes (e.g., time of season, prior EHEs in the season) would enhance the results of these analyses. Further, the results of any enhanced weather-health outcome analyses could be used in a predictive fashion to calculate the potential health impact of forecast conditions. These predictive models could then provide a basis for defining EHE conditions based on predicted changes in health outcomes.

4.1.2 Ensure access to timely meteorological forecasts

An effective EHE notification and response program requires access to reliable meteorological forecasts to provide lead time for implementing program elements.

To forecast EHEs, we strongly recommend that local officials in the United States use and evaluate the meteorological data in the NWS' 5-day regional forecasts.

To enhance EHE forecasting, we recommend developing systems that electronically retrieve and evaluate revised NWS forecast data as they become available. For example, the University of Delaware's Center for Climatic Research has developed automated computer systems for existing EHE notification and response programs that retrieve NWS forecasts as they are updated, assess the forecast data against EHE criteria over the 5-day forecast period, and notify EHE program managers when EHE criteria are satisfied.

The TWG also recommends that cities not use surveillance-based systems as the primary means for identifying EHE conditions. Specifically, systems that rely on observable increases in the demand for medical services such as ambulance calls or demand for emergency room services to identify EHE conditions are not recommended. Although such systems may have a role in determining appropriate resource allocation during an EHE, they are of little value as a forecast tool because they do not provide the necessary lead time for implementing EHE responses.

4.2 Public Education and Awareness of EHE Risk Factors and Health Impacts

A significant source of the public health impacts of EHEs is that individuals either fail to adequately recognize the danger associated with EHE conditions or make poor response choices during EHEs. This is tragically reflected by conclusions that most EHE-attributable deaths are preventable (*CDC, 2004a,c*). This conclusion also suggests that there is a significant need for continued and enhanced public education about the EHE-attributable risks and health impacts.

4.2.1 Increase and improve EHE notification and public education

The TWG strongly recommends there be a formal system for notifying the public when EHE conditions are forecast. At a minimum, announcements made using this system should include information on the anticipated arrival, duration, and severity of the forecast EHE. In addition, these announcements need to provide the public with information about critical EHE risk factors (e.g., being very young or old, using certain medications, having physical or mental impairments that restrict mobility, or lacking the

ability to respond to environmental changes), the symptoms of excessive heat exposure, and recommended response actions (e.g., seek air-conditioned locations, stay hydrated). These announcements can be conveyed to the public through usual methods such as television, radio, and newspapers, and by using established health alert networks such as those operated by some state health departments (e.g., Minnesota). EHE information could also be periodically distributed through other avenues such as fliers in newspapers, local magazines, and church and civic group literature at the start of and periodically throughout the EHE season. Announcements should describe basic precautionary steps individuals can take to limit the health risks: stay hydrated; spend time in air-conditioned environments; wear loose-fitting, light-colored clothing; check on individuals with high-risk characteristics [see Rudnick (2002) and U.S. EPA Aging Initiative (2004) for more detailed information]. The announcements should also suggest appropriate responses when symptoms of excessive heat exposure are observed.

One way to enhance the public education program for EHE risks, impacts, and personal response strategies is to repeatedly present a clear and consistent message to varied audiences. An example of such an effort is Toronto Public Health's hosting of an EHE media day each May before the start of the summer heat season. During this event, Toronto Public Health provides the media with information about the city's EHE notification and response program and answers questions about the health risks and impacts of EHEs. This event maintains media interest in the program and generally results in reporting that keeps EHEs in the public's eye.

An example of another broad-based educational activity that could be pursued is EHE education programs for schools. These programs would help inform a vulnerable segment of the population about risks and appropriate responses and could potentially provide an effective means of having central messages repeated and adopted by a range of households.

EHE education should also be specifically directed at first responders and local emergency management personnel as well as to those who care for older individuals, the very young, the homeless, and the physically and mentally challenged. This targeted education would inform critical response personnel and caregivers about the health risks EHEs pose to members of the vulnerable groups they look after and emphasize the need for active assessment and intervention to prevent adverse health outcomes.

4.2.2 Provide information on proper use of portable electric fans during EHEs

The TWG also strongly recommends that, as part of a public education program, cities emphasize that portable electric fans are not the simple cooling solution they appear to be. Because of the limits of conduction and convection, using a portable electric fan alone when heat index temperatures exceed 99°F actually increases the heat stress the body must respond to by blowing air that is warmer than the ideal body temperature over the skin surface (*American Medical Association Council on Scientific Affairs, 1997; CDC, 2004c*). In these conditions, portable electric fans provide a cooling effect by evaporating sweat. The increased circulation of hot air and increased sweat evaporation can, however, speed the onset of heat-attributable conditions (e.g., heat exhaustion).

Thus, portable electric fans need to be used with caution and under specific circumstances

during an EHE, such as exhausting hot air from a room or drawing in cooler air through an open window. Generally, portable electric fans may not be a practical and safe cooling mechanism during an EHE in homes that are already hot and are not air-conditioned; their use should be discouraged unless the fans are bringing in significantly cooler air from outside the dwelling. If a resident must stay in these dwellings, and if they are unable to access an air-conditioned environment, safer cooling approaches would include taking frequent cool showers and drinking cool, nonalcoholic fluids (e.g., ice water). Because of the importance of this issue, and the contradictory messages people may have received about using portable electric fans during EHEs, Appendix B provides a series of guidelines for fan use during EHEs.

Finally, public officials should review the various educational messages about EHEs for consistency with other messages and information on other issues. For example, recommendations against letting cars idle to control ozone concentrations would be inconsistent with EHE recommendations to stay in air-conditioned environments whenever possible. Public officials can recognize any potentially conflicting messages and then make clear statements about which message should take precedence during an EHE.

4.3 EHE Response Preparation

Preparations for an EHE can be distinguished according to when they are initiated relative to the development of the EHE. Long-term preparations address actions that need to be initiated well before an EHE is forecast because of the time needed to reach necessary agreements, develop systems, or secure supplies and personnel. Short-term preparations are actions that need to be taken when a multiday forecast anticipates EHE conditions. This section focuses on long-term preparations; *Section 4.4* covers short-term preparation actions.

4.3.1 Develop a clear plan of action identifying roles and responsibilities

Defining the structure, relationships, and responsibilities for those supporting an EHE notification and response program (e.g., health departments, utilities, homeless advocates) is an essential long-term action. More generally, this action requires establishing a means for planning and communication among the program supporters so that available resources are used most efficiently and potentially conflicting messages from program participants are clarified.

To achieve this coordination, the TWG strongly recommends establishing periodic meetings among program participants, distributing materials electronically, and designating points of contact for each participating group or agency. Variations across locations in the structure and expertise of agencies and the presence of different private organizations make it problematic to offer specific recommendations about recommended organizational structures for an EHE program. However, because EHEs are a threat to public health, relevant public health agencies can and should play a significant, but not necessarily the lead, role in developing and managing an EHE program. In addition, local emergency management agencies, street and sanitation departments, and health code enforcement staff typically have significant contact with the public. As a result, their information distribution networks and staffs could, depending on local conditions, be a valuable resource to consider in EHE response planning.

Finally, nonprofits such as the Red Cross, homeless outreach programs, area agencies on aging, and senior centers should be actively recruited to become EHE program partners to incorporate their expertise in identifying, communicating with, and providing services to populations that are at high risk during EHEs.

When developing a plan of action, we also strongly recommend EHE program partners pay particular attention to the potential for public recommendations that could conflict during an EHE and provide clear guidance regarding priorities. For example, environmental organizations may generally recommend against idling cars for extended periods of time to improve air quality. This message could be modified to note that if idling is necessary to stay in an air-conditioned environment during an EHE, it is acceptable and preferable to exposing the occupants to the heat.

4.3.2 Develop long-term urban planning programs to minimize heat island formation

Although not the focus of this guidebook, the TWG strongly recommends urban design and development programs be reviewed with a goal of promoting actions that will help control the development of urban heat islands. The longer timeframes envisioned for implementing any actions result in these actions being viewed as part of the EHE preparation actions. However, effective implementation of specific actions designed to mitigate urban heat islands, such as programs to increase the reflectiveness of urban surfaces, increase urban vegetation, and modify behavior, is likely to require a significant public education component.

4.4 EHE Response Actions

This section covers activities that should be initiated after meteorological forecasts identify an impending EHE or EHE conditions have been announced. Four essential recommendations involve these short-term EHE response actions:

- ▶ The public should be encouraged to spend time in available air-conditioned buildings (e.g., shopping centers, movie theaters, senior centers, libraries). To the extent these types of buildings have air conditioning, they are also generally capable of accommodating sudden increases in public use for short periods of time (e.g., a few days) without significant difficulty.
- ▶ EHE program partners should reallocate resources to address critical short-term needs of the EHE that are likely to provide a significant public health benefit. For example, this could involve shifting some public health inspectors from inspecting dining facilities to visiting nursing homes or supporting home environment assessments for individuals who may call available non-911 help lines. Other examples could include having homeless agencies emphasize providing daytime services and interventions during the EHE instead of nighttime services when conditions will generally be cooler.
- ▶ Once a forecast for EHE conditions has been aired, the locality should prohibit the suspension of electric and water services. For this reason, all meetings related to the EHE program should include representatives from local utility companies who have been solicited as program partners.

- ▶ Local medical examiners should be directed to use the guidelines set forth by Donoghue et al. (1997) for classifying heat-related deaths. Although statistical analyses of total daily mortality can and should be used to identify and quantify increases in mortality attributable to the EHE, using the Donoghue et al. guidelines will improve the accuracy of estimates of heat-attributable deaths for those who base these estimates solely on the information from death certificates.

Additional recommendations for response actions that could provide additional public health benefits include:

- ▶ Conducting direct assessments of high-risk individuals during EHEs to check for signs of excessive heat exposure
- ▶ Increasing the extent and duration of public access to air-conditioned settings
- ▶ Increasing the capacity of the emergency medical system to respond to increased surveillance and treatment demands.

Each of these additional recommendations for enhancing short-term responses is discussed below.

EHE health risks are not equally distributed among the population. Therefore, the TWG recommends that enhanced program responses include direct assessments of the health and environments of those at greatest risk during the EHE. Increasing home visits, using telephone check-in systems, and operating toll-free lines to provide advice or receive reports of concerns can alert EHE program staff to individuals who may be at the greatest risk or experiencing health problems during the EHE and help avoid more serious health outcomes.

Spending time in an air-conditioned environment has long been recognized and advocated as the most effective means of preventing heat-attributable health impacts during an EHE. To increase the potential time spent in air-conditioned locations, we also recommend the hours of operation and number of air-conditioned locations (e.g., senior centers, libraries) made publicly available be increased during an EHE. Providing free transportation to these locations could also increase their use.

Finally, regardless of the extent of preparations and response implemented for an EHE, it is likely that the onset of EHE conditions will result in an increase in the demand for emergency medical services in the form of 911 calls, visits to emergency room facilities, and increased volume and need for medical examiner staff and services. The TWG therefore recommends additional staffing of emergency medical personnel to increase the number of people who can receive treatment at any given time, reduce waiting times for treatment, or both. Existing local and state mutual aid agreements and state emergency medical assistance compacts as well as the resources of state and local emergency management agencies, the Federal Emergency Management Agency, the Medical Reserve Corps, and the National Disaster Medical System may be available to help meet some of these needs. The applicability and availability of these resources need to be evaluated, however, and contacts must be established before the onset of EHE conditions.

Appendix C provides one-page summaries of the critical actions individuals and EHE program partners can and should take once EHE conditions are forecast or are being experienced.

4.5 Review EHE Programs to Address Changing Needs, Opportunities, and Constraints

Over time, the constraints and opportunities faced by an EHE notification and response program will shift and experience will be gained in developing working relationships between program partners and in responding to different types of meteorological conditions. Finally, the relative importance of EHEs as a public health threat could change over time.

As a result, the TWG strongly recommends establishing a regular and formal review of the program's performance. For example, in the fall, when the risk of an EHE has diminished, program partners should evaluate past performance and make recommendations to improve the notification and response program. Alternatively, hypothetical "table-top" exercises could be conducted that allow program partners to work through how they would respond to alternative EHE scenarios in order to identify problems with current preparation and response activities and develop solutions.



References

AMA. 2005. Heat-Related Illness During Extreme Weather Emergencies. <http://www.ama-assn.org/ama/pub/category/13637.html>.

American Medical Association Council on Scientific Affairs. 1997. Heat-Related Illness During Extreme Weather Emergencies. Report 10 of the Council on Scientific Affairs (A-97). Presented at the 1997 AMA Annual Meeting.

American Red Cross. 2005. Heat Waves. http://www.redcross.org/services/disaster/0,1082,0_586_00.html.

Associated Press. 2005. Weather: Homeless Hit Hard by Heat. <http://www.cnn.com/2005/WEATHER/07/22/heat.deaths.ap/index.html>. Accessed July 22, 2005.

Basu, R. and J.M. Samet. 2002. Relation between elevated ambient temperature and mortality: A review of the epidemiologic evidence. *Epidemiologic Reviews* 24(2):190-202.

Bernard, S.M. and M.A. McGeehin. 2004. Municipal heat wave response plans. *American Journal of Public Health* 94(9):1520-1522.

CDC. 1994. Heat-related deaths – Philadelphia and United States, 1993-1994. Centers for Disease Control. *Morbidity and Mortality Weekly Report* 43(25):453-455.

CDC. 1995. Heat-related mortality – Chicago, July 1995. Centers for Disease Control. *Morbidity and Mortality Weekly Report* 44(31):577-579.

CDC. 1996. Heat-wave-related mortality – Milwaukee, Wisconsin, July 1995. *Morbidity and Mortality Weekly Report* 45(24):505-507.

CDC. 1997. Heat-related-deaths – Dallas, Wichita, and Cooke counties, Texas, and United States, 1996. *Morbidity and Mortality Weekly Report* 46(23):528-530.

CDC. 1998. Heat-related mortality – United States, 1997. *Morbidity and Mortality Weekly Report* 47(23):473-476.

CDC. 1999. Heat-related-deaths – Missouri, 1998, and United States, 1979-1996. *Morbidity and Mortality Weekly Report* 48(22):469-472.

CDC. 2000. Heat-related illnesses, deaths, and risk factors – Cincinnati and Dayton, Ohio, 1999, and United States, 1979-1997. *Morbidity and Mortality Weekly Report* 49(21):470-473.

CDC. 2001. Heat-related-deaths – Los Angeles County, California, 1999-2000, and United States, 1979-1998. *Morbidity and Mortality Weekly Report* 50(29):623-626.

CDC. 2002. Heat-related deaths – four states, July-August 2001, and United States, 1979-1999. *Morbidity and Mortality Weekly Report* 51(26):567-570.

CDC. 2004a. Extreme Heat: A Prevention Guide to Promote Your Personal Health and Safety. http://www.bt.cdc.gov/disasters/extremeheat/heat_guide.asp. Accessed January 24, 2005.

CDC. 2004b. Extreme Heat Bibliography. <http://www.bt.cdc.gov/disasters/extremeheat/bibliography.asp>.

CDC. 2004c. Extreme Heat: Tips for Preventing Heat-Related Illness. <http://www.bt.cdc.gov/disasters/extremeheat/heattips.asp>. Accessed January 24, 2005.

Chestnut, L.G., W.S. Breffle, J.B. Smith, and L.S. Kalkstein. 1998. Analysis of differences in hot-weather-related mortality across 44 U.S. metropolitan areas. *Environmental Science and Policy* 1(1):59-70.

Davis, R.E., P.C. Knappenberger, P.J. Michaels, and W.M. Novicoff. 2003a. Changing heat-related mortality in the United States. *Environmental Health Perspectives* 111(14):1712-1718.

Davis, R.E., P.C. Knappenberger, W.M. Novicoff, and P.J. Michaels. 2003b. Decadal changes in summer mortality in U.S. cities. *International Journal of Biometeorology* 47(3):166-175.

Donoghue, E.R., M.A. Graham, J. Jentzen, B.D. Lifschultz, J.L. Luke, and H.G. Mirchandani. 1997. Criteria for the diagnosis of heat-related deaths: National Association of Medical Examiners: Position paper. *American Journal of Forensic Medicine and Pathology* 18(1):11-14.

Ebi, K.L., T.J. Teisberg, L.S. Kalkstein, L. Robinson, and R.F. Weiher. 2004. Heat watch/warning systems save lives. *Bulletin of the American Meteorological Society* 85(8):1067-1073.

FEMA. 2005a. Extreme Heat: Are You Ready? <http://www.fema.gov/areyouready/heat.shtm>.

FEMA. 2005b. Hazards Backgrounder: Extreme Heat. <http://www.fema.gov/hazards/extremeheat/heat.shtm>. Accessed February 8, 2005.

Greene, J.S. and L.S. Kalkstein. 1996. Quantitative analysis of summer air masses in the eastern United States and an application to human mortality. *Climate Research* 7:43-53.

Kalkstein, L.S. 1997. Climate and human mortality: Relationship and mitigating measures. *Advances in Bioclimatology* 5:161-177.

Kalkstein, L. 2002. Description of our Heat/Health Watch-Warning Systems: Their Nature Extent, and Required Resources. Prepared for Stratus Consulting, Boulder, CO.

Kalkstein, L.S. and R.E. Davis. 1989. Weather and human mortality: An evaluation of demographic and interregional responses in the United States. *Annals of the Association of American Geographers* 79(1):44-64.

Kalkstein, L.S. and J.S. Greene. 1997. An evaluation of climate/mortality relationships in large U.S. cities and the possible impacts of a climate change. *Environmental Health Perspectives* 105(1):84-93.

Kalkstein, L.S., P.F. Jamason, J.S. Greene, J. Libby, and L. Robinson. 1996. The Philadelphia Hot Weather-Health Watch/Warning System: Development and application: Summer 1995. *Bulletin of the American Meteorological Society* 77(7):1519-1528.

Koppe, C., S. Kovats, G. Jendritzky, and B. Menne. 2004. *Heat-Waves: Risks and Responses*. World Health Organization, Rome.

Kunihiro, A. and J. Foster. 2004. Heat Exhaustion and Heatstroke. <http://www.emedicine.com/emerg/topic236.htm>. Accessed November 28, 2005.

LBNL. 2000. Heat Island Group. <http://eetd.lbl.gov/HeatIsland/>.

Meehl, G.A. and C. Tebaldi. 2004. More intense, more frequent, and longer lasting heat waves in the 21st century. *Science* 305:994-997.

Mills, D.M. 2005. *Excessive Heat Events: A Review of Evidence on Health Risks, Impacts, and Opportunities for Response*. Prepared for U.S. Environmental Protection Agency, Office of Air and Radiation, Office of Atmospheric Programs, Climate Change Division. October, 27.

Milwaukee Health Department and Milwaukee Heat Task Force. 2005. Milwaukee Health Department and Milwaukee Heat Task Force: Plan for Excessive Heat Conditions 2005. http://www.city.milwaukee.gov/display/displayFile.asp?docid = 2689&filename = /Groups/healthAuthors/DCP/PDFs/Heat_Plan_2005_-_rev_6-17-05.pdf

NCAR. 2005. Heat Wave Awareness Homepage. <http://www.isse.ucar.edu/heat/>.

New York City Office of Emergency Management. 2005. Ready New York: Extreme Heat. http://www.nyc.gov/html/oem/html/readynewyork/hazard_heat.html.

NOAA. 1995. Natural Disaster Survey Report: July 1995 Heat Wave. National Oceanic and Atmospheric Administration, Silver Spring, MD.

NWS. 2004. Heat Wave: A Major Summer Killer. National Weather Service. <http://www.nws.noaa.gov/om/brochures/heatwave.pdf>. Accessed January 13, 2005.

NWS. 2005. Natural Hazard Statistics. <http://www.nws.noaa.gov/om/hazstats.shtml>.

NWS Forecast Office, Pueblo, Colorado. 2004. Heat Index. National Weather Service. <http://www.crh.noaa.gov/pub/heat.htm>. Accessed January 13, 2005.

Palecki, M.A., S.A. Changnon, and K.E. Kunkel. 2001. The nature and impacts of the July 1999 heat wave in the midwestern United States: Learning from the lessons of 1995. *Bulletin of the American Meteorological Society* 82(7):1353-1368.

Philadelphia Office of Mental Health & Mental Retardation. 2002. *Fan Facts*. Philadelphia, PA.

Rudnick, A. 2002. *Reducing the Risk of Heat Stress Disorders for Consumers of Behavioral Health Services: Questions and Answers*. Philadelphia Office of Mental Health & Mental Retardation, Philadelphia.

Semenza, J.C., J.E. McCullough, W.D. Flanders, M.A. McGeehin, and J.R. Lumpkin. 1999. Excess hospital admissions during the July 1995 heat wave in Chicago. *American Journal of Preventive Medicine* 16(4):269-277.

Sheridan, S.C. and T.J. Dolney. 2003. Heat, mortality, and level of urbanization: Measuring vulnerability across Ohio, USA. *Climate Research* 24:255-266.

Sheridan, S.C. and L.S. Kalkstein. 1998. Heat watch-warning systems in urban areas. *World Resource Review* 10(3):375-383.

Sheridan, S.C. and L.S. Kalkstein. 2004. Progress in heat watch-warning system technology. *Bulletin of the American Meteorological Society* 85:1931-1941.

Toronto Public Health. 2002. *Summer Safety: Fan Facts*. Toronto, Ontario, Canada.

U.S. EPA. 2005. Heat Wave Response Programs. U.S. Environmental Protection Agency. <http://epa.gov/heatisland/about/heatresponseprograms.html>. Accessed February 22, 2005.

U.S. EPA. 2006. Heat Island Effect. U.S. Environmental Protection Agency. <http://www.epa.gov/heatisland/about/index.html>. Accessed January 5, 2006.

U.S. EPA Aging Initiative. 2004. It's Too Darn Hot: Planning for Excessive Heat Events. September. U.S. Environmental Protection Agency. <http://www.epa.gov/aging/resources/epareports.htm#itstoodarnhot>. Available in English, low literacy, Spanish, Chinese, Vietnamese, Haitian Creole, Russian. Accessed August 3, 2005.

Appendix A: Excessive Heat Event Online Federal Resources

Excessive Heat Health Risks

Heat Wave: A Major Summer Killer. http://www.nws.noaa.gov/om/brochures/heat_wave.shtml. (NWS, 2005)

National Environmental Public Health Tracking: Extreme Heat. <http://ephtracking.cdc.gov/showClimateChangeExtremeHeat.action>. (CDC, 2014)

Heat Safety: Tips for Minimizing Risk from Exposure to Elevated Temperatures

Heat Safety Resources. <http://www.weather.gov/heatsafety>. (NWS, 2014)

Extreme Heat and Your Health. <http://www.cdc.gov/extremeheat/index.html>. (CDC, 2016)

Heat Safety Smartphone Tool (App). https://www.osha.gov/SLTC/heatillness/heat_index/heat_app.html. (OSHA)

Emergency Preparedness and Response – Extreme Heat Resources. <http://emergency.cdc.gov/disasters/extremeheat/>. (CDC, 2015)

Extreme Heat: Are You Ready? <http://www.ready.gov/heat>. (FEMA)

Heat Campaign to Prevent Heat Illness in Outdoor Workers. <https://www.osha.gov/SLTC/heatillness/index.html>. (OSHA)

Heat Stress Recommendations for Employers and Workers. <http://www.cdc.gov/niosh/topics/heatstress/>. (CDC, 2016)

Urban Heat Island Overview and Control Measures

Heat Island Effect. <http://www.epa.gov/heatisland/>. (EPA, 2016)

What You Can Do to Reduce Heat Islands. <http://www.epa.gov/heat-islands/what-you-can-do-reduce-heat-islands>. (EPA, 2015)

Lawrence Berkeley National Laboratory Heat Island Group. <https://heatisland.lbl.gov/>. (DOE, 2016)

Urban and Community Forestry Program. <http://www.fs.fed.us/ucf/>.
(U.S. Forest Service, 2014)

Green Roofs. <http://www.gsa.gov/portal/category/104999>. (GSA, 2015)

EnergySTAR Roofing Products. http://www.energystar.gov/products/building_products/roof_products. (EPA)

Additional Extreme Heat Information

Extreme Heat Bibliography. <http://www.bt.cdc.gov/disasters/extremeheat/bibliography.asp>. (CDC, 2006)

The National Integrated Heat Health Information System (NIHHIS). <http://cpo.noaa.gov/AboutCPO/IntegratedInformationSystems/NIHHIS/AboutNIHHIS.aspx>.
(CDC and NOAA, 2015)

Recognizing, Preventing and Treating Heat-Related Illness: An e-Learning Course.
http://www.cdc.gov/nceh/hsb/extreme/heat_illness_training.htm. (CDC, 2014)

USGCRP Metadata Access Tool for Climate and Health (MATCH). <http://www.match.globalchange.gov/geoportal/catalog/main/home.page>. (USGCRP)

Climate Resilience Toolkit: Extreme Heat. <https://toolkit.climate.gov/topics/human-health/extreme-heat>. (NOAA, 2015)

Natural Hazard Statistics. <http://www.nws.noaa.gov/om/hazstats.shtml>. (NWS, 2005)

Climate Change Indicators in the United States Report. <http://www3.epa.gov/climatechange/science/indicators/>. (EPA, 2015)

Morbidity and Mortality Weekly Report. <http://www.cdc.gov/mmwr/>. (CDC)

Appendix B: Use of Portable Electric Fans During Excessive Heat Events

The widespread availability and ease of using portable electric fans draw many people to use them for personal cooling during an EHE. Portable electric fans can, however, increase the circulation of hot air, which increases thermal stress and health risks during EHE conditions.

As a result, portable electric fans need to be used with caution and under specific circumstances during an EHE. Here is a list of Do's and Don'ts for their use:

Do

- ▶ Use a portable electric fan in or next to an open window so heat can exhaust to the outside (box fans are best).
- ▶ Use a portable electric fan to bring in cooler air from the outside.
- ▶ Plug your portable electric fan directly into a wall outlet. If you need an extension cord, check that it is UL (Underwriter Laboratories) approved in the United States or CSA (Canadian Standards Approved) approved in Canada.

Don't

- ▶ Use a portable electric fan in a closed room without windows or doors open to the outside.
- ▶ Believe that portable electric fans cool air. They don't. They just move the air around and keep you cool by helping to evaporate your sweat.
- ▶ Use a portable electric fan to blow extremely hot air on yourself. This can accelerate the risk of heat exhaustion.
- ▶ Use a fan as a substitute for spending time in an air-conditioned facility during an EHE.

If you are afraid to open your window to use a portable electric fan, choose other ways to keep cool (e.g., cool showers, spend time in an air-conditioned location).

Sources: Philadelphia Office of Mental Health & Mental Retardation, 2002; Toronto Public Health, 2002.

Appendix C: Excessive Heat Events Guidebook in Brief

Quick Tips for Responding to Excessive Heat Events

For the Public

Do

- ▶ Use air conditioners or spend time in air-conditioned locations such as malls and libraries
- ▶ Use portable electric fans to exhaust hot air from rooms or draw in cooler air
- ▶ Take a cool bath or shower
- ▶ Minimize direct exposure to the sun
- ▶ Stay hydrated – regularly drink water or other nonalcoholic fluids
- ▶ Eat light, cool, easy-to-digest foods such as fruit or salads
- ▶ Wear loose fitting, light-colored clothes
- ▶ Check on older, sick, or frail people who may need help responding to the heat
- ▶ Know the symptoms of excessive heat exposure and the appropriate responses.

Don't

- ▶ Direct the flow of portable electric fans toward yourself when room temperature is hotter than 90°F
- ▶ Leave children and pets alone in cars for any amount of time
- ▶ Drink alcohol to try to stay cool
- ▶ Eat heavy, hot, or hard-to-digest foods
- ▶ Wear heavy, dark clothing.

Useful Community Interventions

For Public Officials

Send a clear public message

- ▶ Communicate that EHEs are dangerous and conditions can be life-threatening. In the event of conflicting environmental safety recommendations, emphasize that health protection should be the first priority.

Inform the public of anticipated EHE conditions

- ▶ When will EHE conditions be dangerous?
- ▶ How long will EHE conditions last?
- ▶ How hot will it FEEL at specific times during the day (e.g., 8 a.m., 12 p.m., 4 p.m., 8 p.m.)?

Assist those at greatest risk

- ▶ Assess locations with vulnerable populations, such as nursing homes and public housing
- ▶ Staff additional emergency medical personnel to address the anticipated increase in demand
- ▶ Shift/expand homeless intervention services to cover daytime hours
- ▶ Open cooling centers to offer relief for people without air conditioning and urge the public to use them.

Provide access to additional sources of information

- ▶ Provide toll-free numbers and Web site addresses for heat exposure symptoms and responses
- ▶ Open hotlines to report concerns about individuals who may be at risk
- ▶ Coordinate broadcasts of EHE response information in newspapers and on television and radio.





Excessive Heat Events Guidebook

United States Environmental Protection Agency
Office of Atmospheric Programs (6207J)
1200 Pennsylvania Avenue NW
Washington, DC 20460

Official Business
Penalty for Private Use: \$300

Exhibit F

CDC Extreme Cold Prevention Guide

EXTREME



A Prevention Guide to Promote Your Personal Health and Safety



**U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
CENTERS FOR DISEASE CONTROL AND PREVENTION**





For more information on cold weather conditions and health, please contact:

Centers for Disease Control and Prevention
National Center for Environmental Health, MS F52
4700 Buford Hwy, Atlanta, GA 30341-3717
1-888-232-6789; EHHEinq@cdc.gov
<http://www.bt.cdc.gov/disasters/winter/>

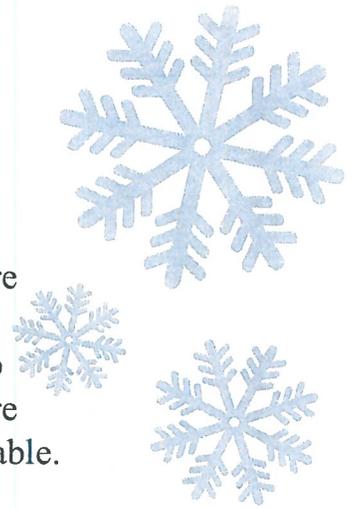
W

hen winter temperatures drop significantly below normal, staying warm and safe can become a challenge. Extremely cold temperatures often accompany a winter storm, so you may have to cope with power failures and

icy roads. Although staying indoors as much as possible can help reduce the risk of car crashes and falls on the ice, you may also face indoor hazards. Many homes will be too cold—either due to a power failure or because the heating system isn’t adequate for the weather. When people must use space heaters and fireplaces to stay warm, the risk of household fires increases, as well as the risk of carbon monoxide poisoning.

Exposure to cold temperatures, whether indoors or outside, can cause other serious or life-threatening health problems. Infants and the elderly are particularly at risk, but anyone can be affected. To keep yourself and your family safe, you should know how to prevent cold-related health problems and what to do if a cold-weather health emergency arises.

The emergency procedures outlined here are not a substitute for training in first aid. However, these procedures will help you to know when to seek medical care and what to do until help becomes available.



What Is Extreme Cold?

What constitutes extreme cold and its effects can vary across different areas of the country. In regions relatively unaccustomed to winter weather, near freezing temperatures are considered “extreme cold.” Whenever temperatures drop decidedly below normal and as wind speed increases, heat can leave your body more rapidly. These weather-related conditions may lead to serious health problems. Extreme cold is a dangerous situation that can bring on health emergencies in susceptible people, such as those without shelter or who are stranded, or who live in a home that is poorly insulated or without heat.

Plan Ahead

Prepare for extremely cold weather every winter—it's always a possibility. There are steps you can take in advance for greater wintertime safety in your home and in your car.

Winter Survival Kit for Your Home

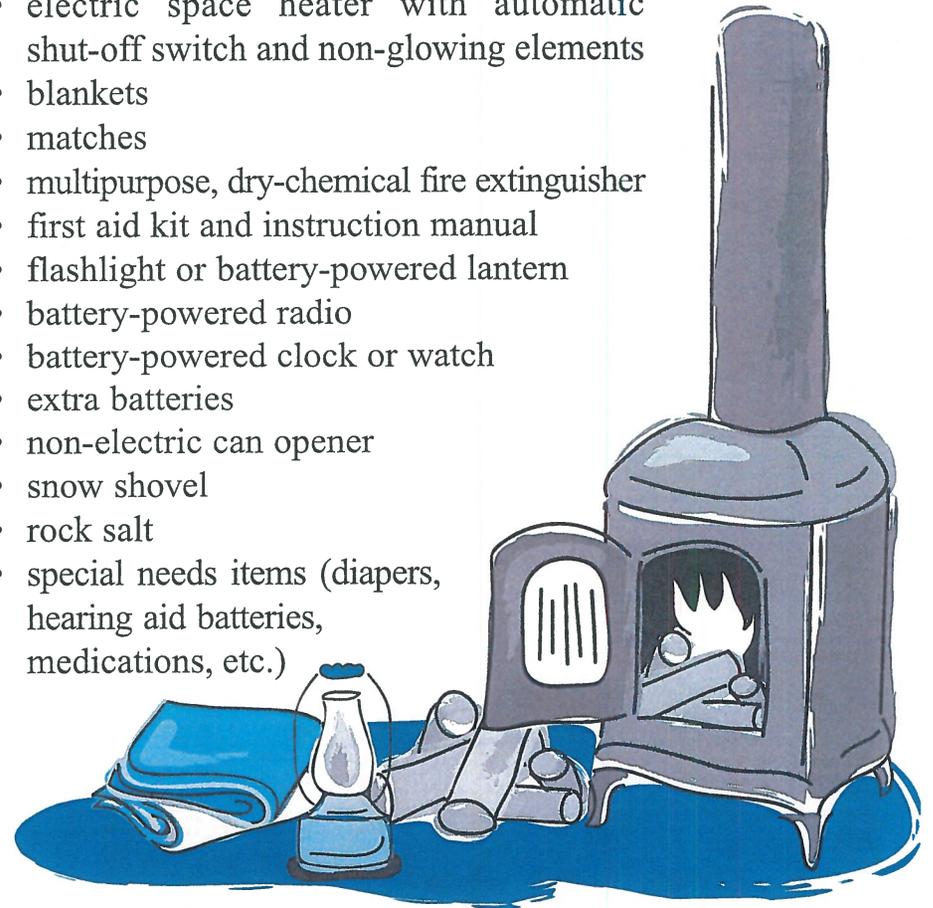
Keep several days' supply of these items:

- **Food** that needs no cooking or refrigeration, such as bread, crackers, cereal, canned foods, and dried fruits. Remember baby food and formula if you have young children.
- **Water** stored in clean containers, or purchased bottled water (5 gallons per person) in case your water pipes freeze and rupture.
- **Medicines** that any family member may need.

If your area is prone to long periods of cold temperatures, or if your home is isolated, stock additional amounts of food, water, and medicine.

Emergency Supplies List:

- an alternate way to heat your home during a power failure:
 - dry firewood for a fireplace or wood stove, or
 - kerosene for a kerosene heater
- furnace fuel (coal, propane, or oil)
- electric space heater with automatic shut-off switch and non-glowing elements
- blankets
- matches
- multipurpose, dry-chemical fire extinguisher
- first aid kit and instruction manual
- flashlight or battery-powered lantern
- battery-powered radio
- battery-powered clock or watch
- extra batteries
- non-electric can opener
- snow shovel
- rock salt
- special needs items (diapers, hearing aid batteries, medications, etc.)



Prepare Your Home for Winter

Although periods of extreme cold cannot always be predicted far in advance, weather forecasts can sometimes provide you with several days' notice. Listen to weather forecasts regularly, and check your emergency supplies whenever a period of extreme cold is predicted.

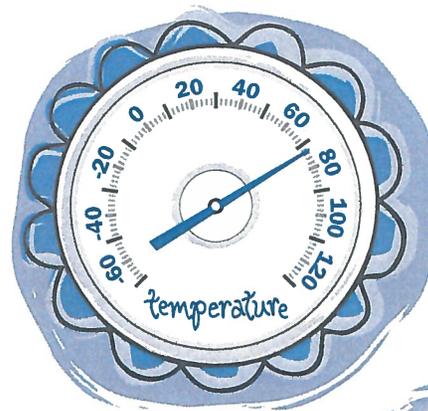
If you plan to use a fireplace or wood stove for emergency heating, have your chimney or flue inspected each year. Ask your local fire department to recommend an inspector, or find one in the yellow pages of your telephone directory under "chimney cleaning."

Also, if you'll be using a fireplace, wood stove, or kerosene heater, install a smoke detector and a battery-operated carbon monoxide detector near the area to be heated. Test them monthly, and replace batteries twice yearly.

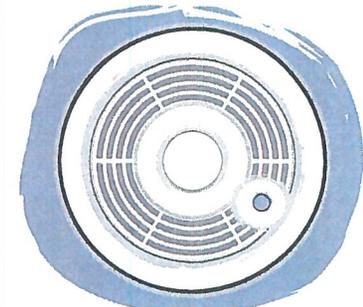
Your ability to feel a change in temperature decreases with age, and older people are more susceptible to health problems caused by cold. If you are over 65 years old, place an easy-to-read thermometer in an indoor location where you will see it frequently, and check the temperature of your home often during the winter months.

Insulate any water lines that run along exterior walls so your water supply will be less likely to freeze. To the extent possible, weatherproof your home by adding weatherstripping, insulation, insulated doors and storm windows, or thermal-pane windows.

If you have pets, bring them indoors. If you cannot bring them inside, provide adequate shelter to keep them warm and make sure that they have access to unfrozen water.



thermometer



smoke detector



carbon monoxide detector

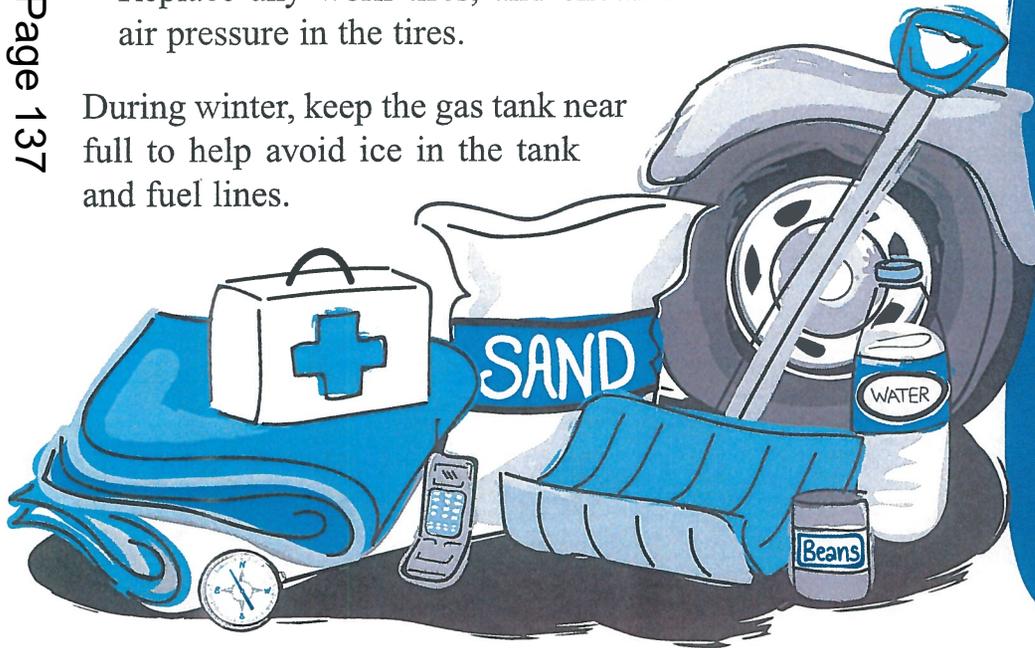
Prepare Your Car for Winter

You can avoid many dangerous winter travel problems by planning ahead. Have maintenance service on your vehicle as often as the manufacturer recommends. In addition, every fall:

- Have the radiator system serviced, or check the antifreeze level yourself with an antifreeze tester. Add antifreeze, as needed.
- Replace windshield-wiper fluid with a wintertime mixture.
- Replace any worn tires, and check the air pressure in the tires.

During winter, keep the gas tank near full to help avoid ice in the tank and fuel lines.

Page 137



Winter Survival Kit for Your Car

Equip your car with these items:

- blankets
- first aid kit
- a can and waterproof matches (to melt snow for water)
- windshield scraper
- booster cables
- road maps
- mobile phone
- compass
- tool kit
- paper towels
- bag of sand or cat litter (to pour on ice or snow for added traction)
- tow rope
- tire chains (in areas with heavy snow)
- collapsible shovel
- container of water and high-caloric canned or dried foods and a can opener
- flashlight and extra batteries
- canned compressed air with sealant (for emergency tire repair)
- brightly colored cloth for added traction

Indoor Safety

Heat Your Home Safely

If you plan to use a wood stove, fireplace, or space heater, be extremely careful. Follow the manufacturer's instructions as well as the home safety measures on page 3, and remember these safety tips:

- Use fireplace, wood stoves, or other combustion heaters only if they are properly vented to the outside and do not leak flue gas into the indoor air space.
- Do not burn paper in a fireplace.
- Ensure adequate ventilation if you must use a kerosene heater.
- Use only the type of fuel your heater is designed to use—don't substitute.
- Do not place a space heater within 3 feet of anything that may catch on fire, such as drapes, furniture, or bedding, and never cover your space heater.
- Never place a space heater on top of furniture or near water.
- Never leave children unattended near a space heater.
- Make sure that the cord of an electric space heater is not a tripping hazard but do not run the cord under carpets or rugs.
- Avoid using extension cords to plug in your space heater.

- If your space heater has a damaged electrical cord or produces sparks, do not use it.
- Store a multipurpose, dry-chemical fire extinguisher near the area to be heated.
- Protect yourself from carbon monoxide (CO) poisoning by installing a battery-operated CO detector and never using generators, grills, camp stoves, or similar devices indoors.

Light and Cook Safely

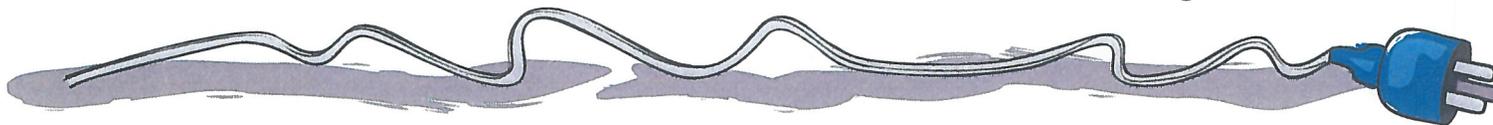
If there is a power failure:

- Use battery-powered flashlights or lanterns rather than candles, if possible.
- Never leave lit candles unattended.
- Never use a charcoal or gas grill indoors—the fumes are deadly.



Never use an electric generator indoors, inside the garage, or near the air intake of your house because of the risk of carbon monoxide poisoning:

- Plug in appliances to the generator using individual heavy-duty, outdoor-rated cords.
- Do not use the generator or appliances if they are wet because of the risk of electrocution.
- Do not store gasoline indoors where the fumes could ignite.



Conserve Heat

You may need fresh air coming in for your heater or for emergency cooking arrangements. However, if you don't need extra ventilation, keep as much heat as possible inside your home. Avoid unnecessary opening of doors or windows. Close off unneeded rooms, stuff towels or rags in cracks under doors, and close draperies or cover windows with blankets at night.

Monitor Body Temperature

Infants less than one year old should never sleep in a cold room because (1) infants lose body heat more easily than adults; and (2) unlike adults, infants can't make enough body heat by shivering. Provide warm clothing for infants and try to maintain a warm indoor temperature. If the temperature cannot be maintained, make temporary arrangements to stay elsewhere. In an emergency, you can keep an infant warm using your own body heat. If you must sleep, take precautions to prevent rolling on the baby. Pillows and other soft bedding can also present a risk of smothering; remove them from the area near the baby.

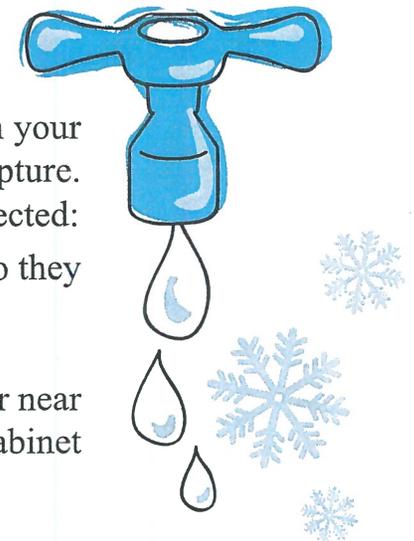
Older adults often make less body heat because of a slower metabolism and less physical activity. If you are over 65

years of age, check the temperature in your home often during severely cold weather. Also, check on elderly friends and neighbors frequently to ensure that their homes are adequately heated.

Keep a Water Supply

Extreme cold can cause water pipes in your home to freeze and sometimes rupture. When very cold temperatures are expected:

- Leave all water taps slightly open so they drip continuously.
- Keep the indoor temperature warm.
- Improve the circulation of heated air near pipes. For example, open kitchen cabinet doors beneath the kitchen sink.



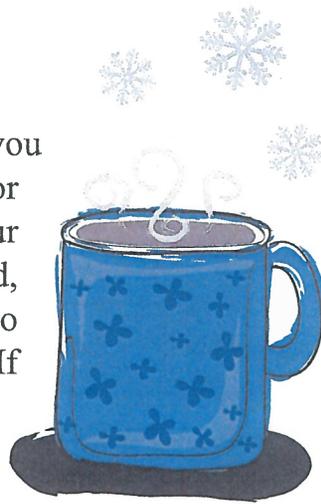
If your pipes do freeze, do not thaw them with a torch. Instead, thaw them slowly by directing the warm air from an electric hair dryer onto the pipes.

If you cannot thaw your pipes, or the pipes are ruptured, use bottled water or get water from a neighbor's home. As an emergency measure—if no other water is available—snow can be melted for water. Bringing water to a rolling

boil for one minute will kill most microorganisms or parasites that may be present, but won't remove chemical pollutants sometimes found in snow.

Eat and Drink Wisely

Eating well-balanced meals will help you stay warmer. Do not drink alcoholic or caffeinated beverages—they cause your body to lose heat more rapidly. Instead, drink warm, sweet beverages or broth to help maintain your body temperature. If you have any dietary restrictions, ask your doctor.



Outdoor Safety

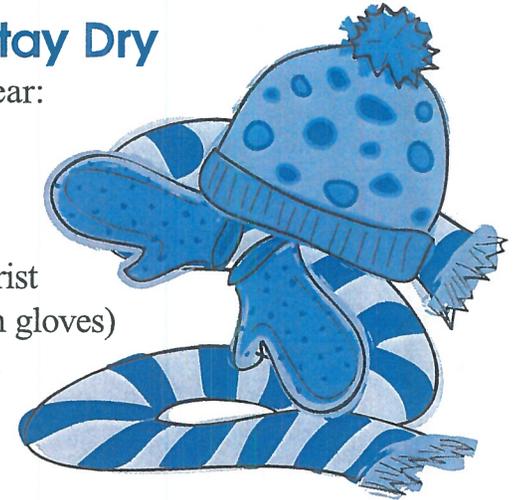
When the weather is extremely cold, and especially if there are high winds, try to stay indoors. Make any trips outside as brief as possible, and remember these tips to protect your health and safety:



Dress Warmly and Stay Dry

Adults and children should wear:

- a hat
- a scarf or knit mask to cover face and mouth
- sleeves that are snug at the wrist
- mittens (they are warmer than gloves)
- water-resistant coat and boots
- several layers of loose-fitting clothing



Be sure the outer layer of your clothing is tightly woven, preferably wind resistant, to reduce body-heat loss caused by wind. Wool, silk, or polypropylene inner layers of clothing will hold more body heat than cotton. Stay dry—wet clothing chills the body rapidly. Excess perspiration will increase heat loss, so remove extra layers of clothing whenever you feel too warm. Also, avoid getting gasoline or alcohol on your skin while de-icing and fueling your car or using a snow blower. These materials in contact with the skin greatly increase heat loss from the body. Do not ignore shivering. It's an important first sign that the body is losing heat. Persistent shivering is a signal to return indoors.

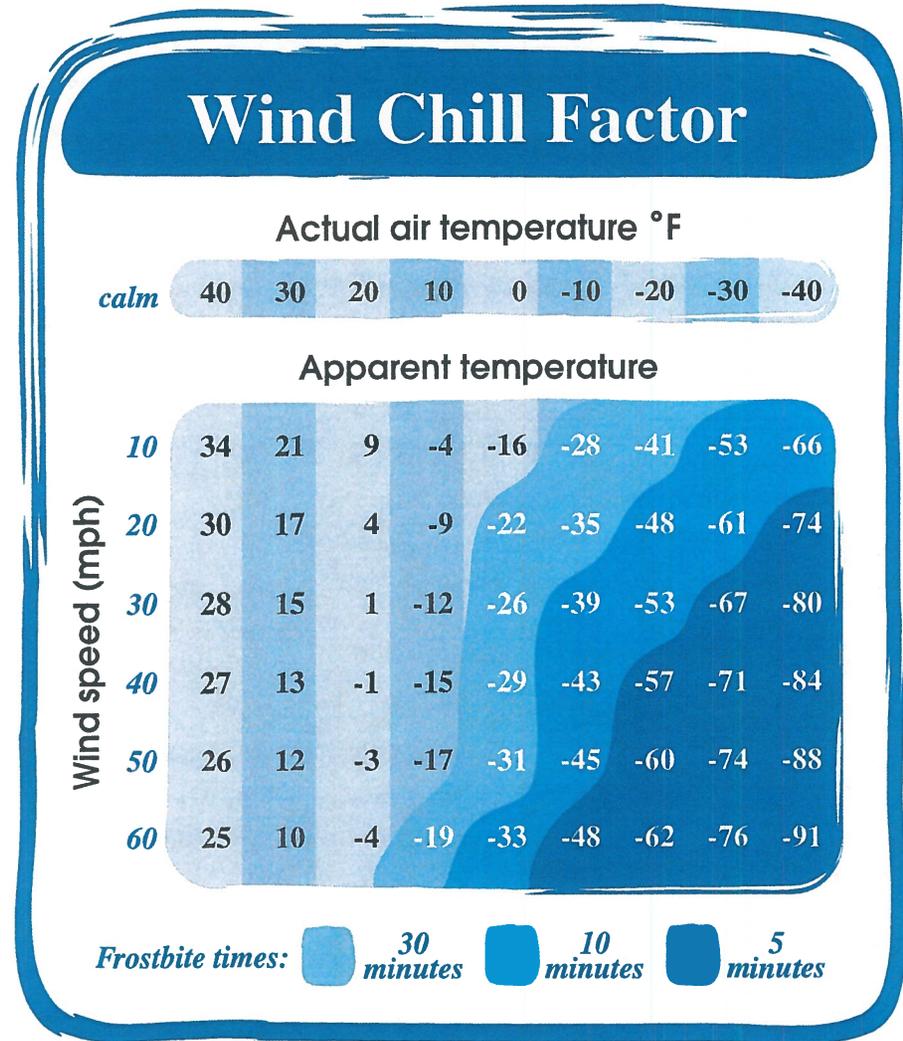
Avoid Exertion

Cold weather puts an extra strain on the heart. If you have heart disease or high blood pressure, follow your doctor's advice about shoveling snow or performing other hard work in the cold. Otherwise, if you have to do heavy outdoor chores, dress warmly and work slowly. Remember, your body is already working hard just to stay warm, so don't overdo it.

Understand Wind Chill

The Wind Chill index is the temperature your body feels when the air temperature is combined with the wind speed. It is based on the rate of heat loss from exposed skin caused by the effects of wind and cold. As the speed of the wind increases, it can carry heat away from your body much more quickly, causing skin temperature to drop. When there are high winds, serious weather-related health problems are more likely, even when temperatures are only cool.

The Wind Chill Chart to the right shows the difference between actual air temperature and perceived temperature, and amount of time until frostbite occurs.



National Weather Service (NWS) Wind Chill Chart adapted May 2004 from <http://www.nws.noaa.gov/om/windchill/>

Avoid Ice

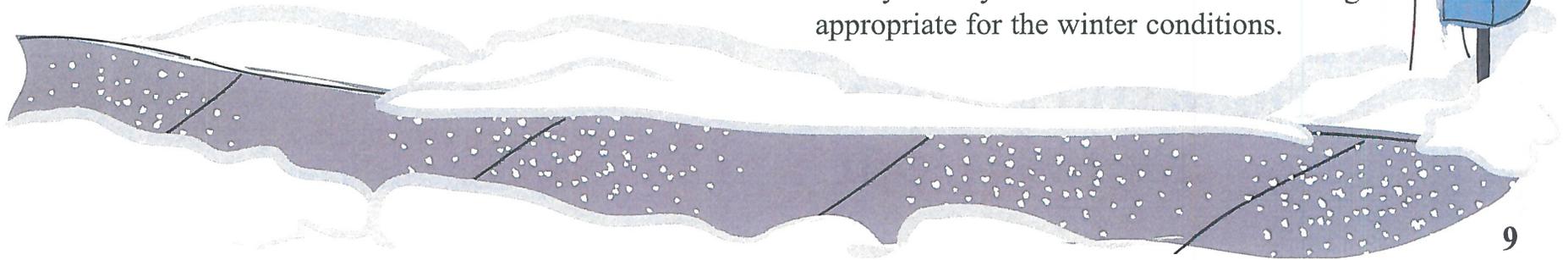
Walking on ice is extremely dangerous. Many cold-weather injuries result from falls on ice-covered sidewalks, steps, driveways, and porches. Keep your steps and walkways as free of ice as possible by using rock salt or another chemical de-icing compound. Sand may also be used on walkways to reduce the risk of slipping.

Be Safe During Recreation

Notify friends and family where you will be before you go hiking, camping, or skiing. Do not leave areas of the skin exposed to the cold. Avoid perspiring or becoming overtired. Be prepared to take emergency shelter. Pack dry clothing, a two-wave radio, waterproof matches and paraffin fire starters with you. Do not use alcohol and other mood altering substances, and avoid caffeinated beverages. Avoid walking on ice or getting wet. Carefully watch for signs of cold-weather health problems.

Be Cautious About Travel

- Listen for radio or television reports of travel advisories issued by the National Weather Service.
- Do not travel in low visibility conditions.
- Avoid traveling on ice-covered roads, overpasses, and bridges if at all possible.
- If you must travel by car, use tire chains and take a mobile phone with you.
- If you must travel, let someone know your destination and when you expect to arrive. Ask them to notify authorities if you are late.
- Check and restock the winter emergency supplies in your car before you leave.
- Never pour water on your windshield to remove ice or snow; shattering may occur.
- Don't rely on a car to provide sufficient heat; the car may break down.
- Always carry additional warm clothing appropriate for the winter conditions.



What to Do if You Get Stranded

Staying in your vehicle when stranded is often the safest choice if winter storms create poor visibility or if roadways are ice covered. These steps will increase your safety when stranded:

- Tie a brightly colored cloth to the antenna as a signal to rescuers and raise the hood of the car (if it is not snowing).
- Move anything you need from the trunk into the passenger area.
- Wrap your entire body, including your head, in extra clothing, blankets, or newspapers.
- Stay awake. You will be less vulnerable to cold-related health problems.
- Run the motor (and heater) for about 10 minutes per hour, opening one window slightly to let in air. Make sure that snow is not blocking the exhaust pipe—this will reduce the risk of carbon monoxide poisoning.
- As you sit, keep moving your arms and legs to improve your circulation and stay warmer.
- Do not eat unmelted snow because it will lower your body temperature.
- Huddle with other people for warmth.



Cold-Weather Health Emergencies

Serious health problems can result from prolonged exposure to the cold. The most common cold-related problems are hypothermia and frostbite.

Hypothermia

When exposed to cold temperatures, your body begins to lose heat faster than it can be produced. Prolonged exposure to cold will eventually use up your body's stored energy. The result is hypothermia, or abnormally low body temperature. Body temperature that is too low affects the brain, making the victim unable to think clearly or move well. This makes hypothermia particularly dangerous because a person may not know it is happening and won't be able to do anything about it.

Hypothermia is most likely at very cold temperatures, but it can occur even at cool temperatures (above 40°F) if a person becomes chilled from rain, sweat, or submersion in cold water.

Victims of hypothermia are often (1) elderly people with inadequate food, clothing, or heating; (2) babies sleeping in cold bedrooms; (3) people who remain outdoors for long periods—the homeless, hikers, hunters, etc.; and (4) people who drink alcohol or use illicit drugs.

Recognizing Hypothermia

Warnings signs of hypothermia:

Adults:

- shivering, exhaustion
- confusion, fumbling hands
- memory loss, slurred speech
- drowsiness

Infants:

- bright red, cold skin
- very low energy

What to Do

If you notice any of these signs, take the person's temperature. If it is below 95°, the situation is an emergency—get medical attention immediately.



If medical care is not available, begin warming the person, as follows:

- Get the victim into a warm room or shelter.
- If the victim has on any wet clothing, remove it.
- Warm the center of the body first—chest, neck, head, and groin—using an electric blanket, if available. Or use skin-to-skin contact under loose, dry layers of blankets, clothing, towels, or sheets.
- Warm beverages can help increase the body temperature, but do not give alcoholic beverages. Do not try to give beverages to an unconscious person.
- After body temperature has increased, keep the person dry and wrapped in a warm blanket, including the head and neck.
- Get medical attention as soon as possible.

A person with severe hypothermia may be unconscious and may not seem to have a pulse or to be breathing. In this case, handle the victim gently, and get emergency assistance immediately. Even if the victim appears dead, CPR should be provided. CPR should continue while the victim is being warmed, until the victim responds or medical aid becomes available. In some cases, hypothermia victims who appear to be dead can be successfully resuscitated.

Frostbite

Frostbite is an injury to the body that is caused by freezing. Frostbite causes a loss of feeling and color in affected areas. It most often affects the nose, ears, cheeks, chin, fingers, or toes. Frostbite can permanently damage the body, and severe cases can lead to amputation. The risk of frostbite is increased in people with reduced blood circulation and among people who are not dressed properly for extremely cold temperatures.

Recognizing Frostbite

At the first signs of redness or pain in any skin area, get out of the cold or protect any exposed skin—frostbite may be beginning. Any of the following signs may indicate frostbite:

- a white or grayish-yellow skin area
- skin that feels unusually firm or waxy
- numbness

A victim is often unaware of frostbite until someone else points it out because the frozen tissues are numb.

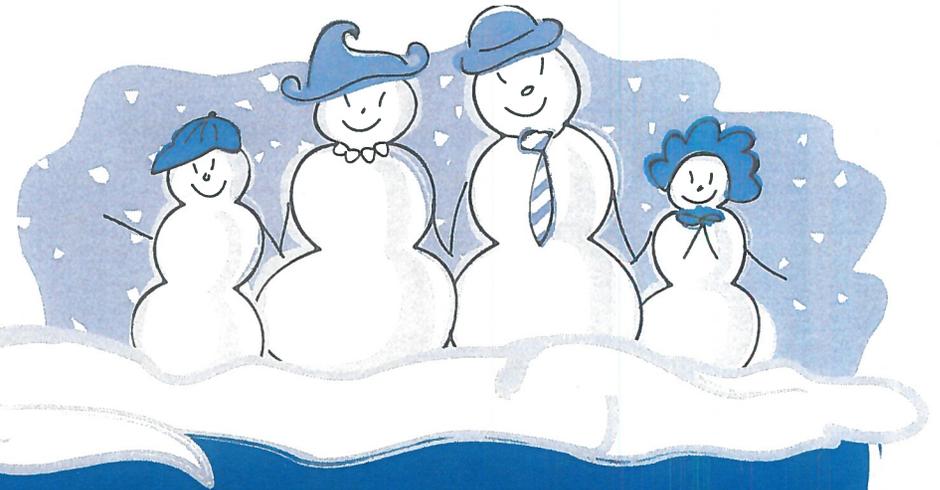
What to Do

If you detect symptoms of frostbite, seek medical care. Because frostbite and hypothermia both result from exposure, first determine whether the victim also shows signs of hypothermia, as described previously. Hypothermia is a more serious medical condition and requires emergency medical assistance.

If (1) there is frostbite but no sign of hypothermia and (2) immediate medical care is not available, proceed as follows:

- Get into a warm room as soon as possible.
- Unless absolutely necessary, do not walk on frostbitten feet or toes—this increases the damage.
- Immerse the affected area in warm—not hot—water (the temperature should be comfortable to the touch for unaffected parts of the body).
- Or, warm the affected area using body heat. For example, the heat of an armpit can be used to warm frostbitten fingers.
- Do not rub the frostbitten area with snow or massage it at all. This can cause more damage.
- Don't use a heating pad, heat lamp, or the heat of a stove, fireplace, or radiator for warming. Affected areas are numb and can be easily burned.

These procedures are not substitutes for proper medical care. Hypothermia is a medical emergency and frostbite should be evaluated by a health care provider. It is a good idea to take a first aid and emergency resuscitation (CPR) course to prepare for cold-weather health problems. Knowing what to do is an important part of protecting your health and the health of others.



One Last Cool Tip . . .

Taking preventive action is your best defense against having to deal with extreme cold-weather conditions. By preparing your home and car in advance for winter emergencies, and by observing safety precautions during times of extremely cold weather, you can reduce the risk of weather-related health problems.

Exhibit G

Severe Weather Shelter Response Plan



SEVERE WEATHER SHELTER RESPONSE PLAN

MODEL TEMPLATE

*“Providing temporary emergency shelter
to homeless persons during severe weather.”*

December 30, 2008

[Revised 11/2018]

Acknowledgements

*Faith-Based and Community Shelter Providers
Housing and Supportive Services Network (HSSN)
Interfaith Committee on Homelessness (ICH)
Family Promise of Washington County/Interfaith Hospitality Network
Washington County Consolidated Communication Agency (911 WCCCA)
211info Information and Referral Call Center
Washington County Department of Housing Services*

Prepared by Annette M. Evans, Homeless Program Manager

Department of Housing Services
111 N.E. Lincoln St., #200-L, Hillsboro, Oregon, 97124
Phone: 503/846-4760 FAX: 503/693-4795 TDD: 503/693-4793

Equal Housing Opportunity

SEVERE WEATHER SHELTER RESPONSE PLAN FOR HOMELESS PERSONS

REVISION HISTORY

Revision Date	Description of Changes
2008	Original Version
11/2016	Spanish version of Guest Guidelines added (Appendices)
11/2018	Introduction: add "Inclement" v. "Severe" definition; Components of A Shelter Plan: add Fire and Life Safety, Evacuation, Smoke Detector section.

Table of Contents

INTRODUCTION

Purpose	3
Definition of Severe Weather Condition/Incident	3

COMPONENTS OF A SHELTER PLAN

Staffing	4
Volunteer Recruiting.....	4
Meals	4
Building/Facility Amenities	4
Maximum Number of Occupants Allowed.....	5
Fire Safety and Evacuation	5
Smoke Detection, Smoke Alarms and Carbon Monoxide Detectors	5
Means of Egress (Exits)	6
Emergency Evacuation Plan	6

DEVELOPING YOUR SHELTER

General Items for Discussion	7
Identify Shelter Procedures for Guest Intake	7
First Aid Plan	7
On-Site Needs for Shelter Hosts.....	8
Resource Referral Information for Guests	8
Personal Care Items	8

STEPS TO BECOMING A SHELTER PROVIDER

Orientation for Shelter Hosts.....	9
Disclaimer or Policy Document	9
Set-up And Activation.....	9
Recordkeeping	10
Shelter Signage.....	10

SHELTER PLANS AND PROCEDURES

Severe Weather Shelter Response Plan	11
Appendix A Activation/De-Activation.....	11
Emergency Procedures.....	11
Hours of Operation.....	12
Shelter Schedule – Template.....	13

STAFFING – POSITION DESCRIPTIONS

Shelter Coordinator	1
Shelter Host.....	14
Meal Coordinator.....	15
Logistics Coordinator	15

APPENDICES

Severe Weather Shelter Response Plan (Appendix A)	17
Shelter Coordinator Directory (Appendix B).....	20
Volunteer Recruitment Sign-Up Form.....	21
In Case Of An Emergency Form - HELP	22
Guest Guidelines Form	23
Shelter Intake and Guest Sign-in Log Form – Template	26
Shelter Signage – Template.....	27

* Comments regarding this document and the Severe Weather Shelter Response Plan may be directed to the Washington County Homeless Program Manager.

INTRODUCTION

This template is designed to provide a model for a Severe Weather Shelter Response Plan (“Plan”) for use by community partners in providing emergency temporary shelter to homeless persons during inclement and life-threatening weather.

The template may need to be adapted to reflect the amenities of the structure and services available by the community partner; e.g. – shelter site occupancy capacity, hours of intake, etc.

Inclement weather conditions such as rain, wind, high/low temperatures can have detrimental and life-safety impact for vulnerable homeless populations with chronic health and disabling conditions. This SWS plan focuses on:

- Operating inclement shelters on designated dates during the months of November through March to provide respite from the weather elements; and
- Providing expansion of shelter operations during extreme severe weather that may be life-threatening due to severity of temperatures and length of weather incident (pro-longed more than 2 to 3 days).

PURPOSE

The purpose of this plan is to provide information and procedures for use by community partners to open and operate emergency temporary shelters for homeless persons in the event of inclement or severe weather conditions. It describes the underlying goals of the plan, the definition of a severe inclement weather event, the responsibilities of various community and public partners, and coordination activities with other agencies.

DEFINITION OF WEATHER CONDITIONS/INCIDENT

For the purpose of this document, inclement and severe weather are defined as follows:

Inclement Weather: Harsh weather that is wet and cold where temperatures may reach 32 degrees Fahrenheit or below during Winter months (November to March).

Severe Weather: Extreme weather that poses risk to life and property that may include a special alert forecast predicting strong wind, heavy rain, frozen precipitation, or other extreme weather for a period of 24 or more hours during Winter months (November to March).

COMPONENTS OF A SHELTER PLAN

Many resources are needed to host a shelter site for homeless persons to facility amenities suitable to serving various homeless populations, volunteer staff, and meals. A campaign to solicit volunteers who will be committed to provide time and support are essential to the successful operation and service delivery to guests.

Staffing

At a minimum, the following volunteers will be needed:

- a) Shelter Coordinator – Person(s) who will act as primary contact for all shelter activities and is responsive to the Pastor (church shelter) or Agency Director (nonprofit or public shelter) and the Homeless Program Coordinator. A shelter may designate up to two (2) persons as Shelter Coordinators.
- b) Shelter Host – Persons who will oversee the shelter operations and act as hosts on day or night shifts, greet guests at the door and provide facility tour. Minimum of two persons at all times, with additional hosts recommended with increased shelter attendance. Hosts will work with the Logistics Coordinator to set-up shelter amenities; e.g. cots, etc. Hosts will work under the direction of the Shelter Coordinator.
- c) Meal Coordinator – Person(s) who will arrange for meals for shelter guests. The Meal Coordinator will work under the direction of the Shelter Coordinator.
- d) Logistics Coordinator – Person(s) who will provide services in support of the shelter operations to include shopping for shelter necessities, transportation, shelter set-up, etc. If a church van is available, may be responsible to coordinate pick-up and drop-off of homeless at designated locations.

Volunteer Recruiting

Most people are inherently generous in sharing their time and talent if we but ask. To recruit volunteers, consider hosting an Information Exchange meeting following prayer services if a faith-based shelter or a meeting with advocates of your agency to discuss the potential to engage in helping the homeless by providing shelter and meals during severe weather. The meeting provides individuals an opportunity to ask questions and better understand how they might support a weather shelter.

Invite persons willing to make a commitment by collecting their contact information (e.g. Name, Phone Number, and Email Address). This list of contacts will be used to receive formal training and an orientation regarding the shelter program.

→ See Appendices, Volunteer Recruitment Sign-Up Form

Meals

An evening or morning meal is recommended, but not required. Meals may consist of easy to chew and digest ingredients to include soup, sandwiches, cereal or other items made available by the shelter host site.

Building/Facility Amenities

As part of the development of a shelter plan, the church/agency will assess the availability of space, amenities of the facility, and liability assumed under this program.

Maximum Number of Occupants Allowed

The maximum number of allowable temporary shelter occupants shall be calculated using an occupant load factor of one individual for every 35 square feet of room area. For example, a room with 1,000 square feet would be allowed to provide temporary shelter for up to 28 people. Please check with your local Fire Marshal for additional details on occupancy requirements.

Fire Safety and Evacuation

The local Fire Marshal and the Building Official, or their designees, shall conduct an inspection with the shelter coordinator present prior to commencement of work in preparation for operation of the temporary shelter. The inspection shall determine if the building or area is appropriate for the temporary shelter and identify what work needs to be completed prior to operation.

Smoke Detection, Smoke Alarms and Carbon Monoxide Detectors

- a. All temporary shelter sleeping areas shall be provided with interconnected smoke alarms or a complete smoke detection system.
- b. Smoke detectors or smoke alarms may be battery operated.
- c. All other areas of the building used for shelter operation shall be equipped with smoke detectors or smoke alarms as prescribed by the Fire Marshal's Office as follows:
 - (1) Buildings housing a temporary shelter shall be equipped with a smoke detection and alarm system installed under permit through the Fire Marshal's Office.
 - (2) Each room used for sleeping shall be provided with a working smoke alarm (10 year battery with hush feature) or a smoke detector tied into an alarm system and a carbon monoxide detector.
 - (3) Hallways serving as a means of egress for sleeping rooms shall be provided with a working smoke alarm (10 year Battery with Hush feature) or a smoke detector tied into an alarm system. Coverage of the hallways shall be per NFPA 72 spacing requirements.
 - (4) In buildings that are not equipped throughout with an automatic sprinkler system installed in accordance with the fire code, the smoke alarms in guestrooms shall be connected to an emergency electrical system and shall be annunciated by guestroom at a constantly attended location from which the fire alarm system is capable of being manually activated. The constantly attended location must be served by a responsible adult that:
 - (a) Has a high degree of familiarity with the building layout and emergency egress routes in the event of an emergency.
 - (b) Has an understanding of their responsibilities to the occupants with regards to emergency evacuation of the building in the event of an emergency.

Means of Egress (Exits)

All floor levels with a temporary shelter area shall have a minimum of two means of egress (exits) from each floor level. Exits from sleeping rooms shall be provided as follows:

- a. Ground floor sleeping rooms with less than 50 occupants.** Sleeping rooms located on the ground floor of the building serving 49 people or less shall have at least one exit and at least one window qualifying as an escape or rescue window as defined by the building code.
- b. All other sleeping rooms.** Rooms used as shelter sleeping rooms that are located on floor levels other than the ground floor and that have an occupant load of 10 or more shall have two exits from the room. The exits serving the room shall be separated by a distance equal to at least 1/3 of the longest diagonal distance of the room.

Emergency Evacuation Plan

All temporary shelters shall create and maintain an emergency evacuation plan addressing the evacuation of all visitors and staff in an emergency event. At a minimum, the emergency evacuation plan shall contain the following:

- a. Building Floor Plans.** Building floor plans for each floor being used as temporary shelter with the sleeping rooms clearly identified;
- b. Room Size.** The square footage of the rooms used as sleeping rooms and the use of adjacent rooms;
- c. Egress Path.** A plan to show egress from the proposed shelter spaces and from the building; and
- d. Life-Safety Systems.** Information regarding sprinkler systems, smoke detection or fire alarm systems in the building.

DEVELOPING YOUR SHELTER

The following is a checklist of items for discussion in your consideration to open as a temporary emergency shelter for homeless persons during severe weather.

General Items

- * Time the shelter will open to guests.
- * Time the shelter will close in the morning.
- * What door will the guest enter and depart.
- * Availability of building facilities for extended periods 2 to 10 days, if needed.
- * How many guests will you host?
- * Populations you will serve?
- * Number of volunteers needed.
- * Other items as defined in Appendix A of the shelter plan.
- * No evangelism.
- * Listen without judging. Be respectful of their privacy.
- * Do not offer financial assistance.

Identify Shelter Procedures for Guest Intake

Intake and Guest Sign-In Log (sign in sheet for volunteers and for guests)

Date, Name of Guest/s, Male/Female, Volunteer(s) on Duty, Comments

→ See Appendices, Shelter Intake and guest Sign-In Log Form

Guest Guidelines (have guest sign they received a copy of guidelines)

Go over guidelines with guest, have them sign on log sheet they received a copy and understand the rules.

→ See Appendices, Guest Guidelines Form

What to say to guests – welcome, go over guidelines and procedures, and give a tour of the church/facility

Where do people go to eat meal and sleep

Building information (posted in several locations)

Lights

Heat

Locking doors

Restrooms/showers

Sleeping areas (procedures posted)

Smoking

Where is telephone located

First Aid Plan

What to do in case of emergency:

Do not handle blood!

Emergency phone #'s: **9.1.1** or non-emergency **503-629-0111**

Post emergency contact information at all phones; include name of church/shelter and street address of the church/shelter.

→ See Appendices, In Case Of An Emergency Form

DEVELOPING YOUR SHELTER - CONTINUED

On-Site Needs of Shelter Hosts (Volunteers)

Name tags for volunteers

Schedule of open shelters, open and closing schedule.

Signs on outside shelter doors of the building – where to enter.

Resource Referral Information for guests

Dial **211** or if using a cell dial **503-222-5555** for referral to shelter locations and community resources.

List of shelters

Medical

Food kitchens, food boxes

Clothes

Personal Care Items

Bedding (if you give guests bedding tell them they can take it with them)

Toiletry items (individual bag of items they can take with them)

Snacks to go (juice boxes, energy bars)

STEPS TO BECOME A SHELTER PROVIDER

Orientation for Shelter Coordinator and Hosts

An "Orientation" on the shelter plan will be provided to church/agency sites upon request. The orientation will address items outlined in this manual. To arrange an orientation for your church/agency, please contact the Homeless Program Manager in Washington County, and a session will be schedule with shelter staff. Contact information is included in the Plan.

→ See Appendices, Severe Weather Shelter Response Plan

Disclaimer or Policy Document

We encourage you to have a one-page disclaimer or policy document with some instructions and guidelines for both guests and volunteers and a log sheet for recording names of guests and volunteers (with a place for comments). There should be a place to sign acknowledging that they agree to follow the procedures.

→ See Appendices, Guest Guidelines Form

→ See Appendices, Shelter Intake and Guest Sign-In Log Form

Set-up and Activation

Phase 1 - Preliminary Set-Up

As soon as the shelter site establishes the details and commitment to provide shelter services, the Shelter Coordinator completes Appendix A of the Plan and forwards to the Homeless Program Manager on or before October 1 annually. A community partner may open a shelter site after October 1; however, shelters are encouraged to register early to facilitate the process prior to severe winter weather incidents.

Phase 2 - Shelter Activation

1. Church/agency monitors weather and determines they have facility accommodations and volunteers to open as a shelter.
2. Church/agency activates by emailing Appendix A with activation date and times to 211info contacts and the Homeless Program Manager (follow instructions in the Plan attached to this document and located on the county's website at <http://www.co.washington.or.us/homeless>. The Homeless Program Manager forwards a consolidated shelter activation schedule to law enforcement, fire/emergency services, severe weather shelter providers, and HSSN members.
4. 211info (and other services and shelters) will refer street people to shelter sites based on information in Appendix A - giving location information, time, and other directions as needed.
5. When the Shelter Host determines the severe weather is over and/or does not have facility and staffing to support the shelter operations, the Shelter Host will "deactivate" by contacting the Homeless Program Manager, who will respectively remove the Shelter Host site from the available shelter schedule listing.

STEPS TO BECOME A SHELTER PROVIDER - CONTINUED

Recordkeeping

The plan recommends all Church Host Sites use a standard log sheet (attached) for comments that is faxed or emailed to the Homeless Program Manager who will collect and record data of emergency shelter.

It is recommended each host site have a 3-ring binder to keep all shelter information to include:

- a) Disclaimer or Policy
- b) Intake and Guest Sign-In Log
- c) Emergency Contact Information
- d) Resource and Referral Information for Guests
- e) Other

Signage as a Shelter Location

Identification of the shelter entrance through adequate signage is important to ensure all homeless enter the shelter location through one intake process. Signage should identify the entrance of the shelter, hours of operation (open/close), and include phone contact information, e.g. – 211 or 503-222-5555. For consistency across the county, shelters may use a consistent shelter sign that is printable in color with GREEN indicating shelter is open and RED indicating the shelter is closed.

Where possible, please have the details of your sign translated into Spanish and/or other languages.

→ See Appendices, Shelter Signage - Template

SHELTER PLANS AND PROCEDURES

Severe Weather Shelter Response Plan (“Plan”)

Active shelter hosts participating in the Plan will review and follow the procedures. The Plan is available as an appendices to this document and is located online at

<http://www.co.washington.or.us/homeless>.

→ See Appendices, Severe Weather Shelter Response Plan

Appendix A – Details of Shelter Host Site

The Appendix A is the universal document prepared by each Shelter Host site and demonstrates the church/agency’s commitment to partner in the plan. The information includes shelter street address, contact information, capacity of the shelter site, hours of intake, pet policy, and homeless populations to be served by the shelter. Appendix A can be found in the Plan document.

The Appendix A form is used by the shelter host site as official communication on dates and times of activation and de-activation as a shelter.

→ See Appendices, Severe Weather Shelter Response Plan

Emergency Procedures

While incidents are rare at the shelter, it’s important to be prepared by documenting procedures to be followed during an emergency and practice this response with Shelter Hosts. At a minimum there should be one telephone accessible to all Hosts. All Hosts should be aware of telephone locations throughout the building. Shelter Hosts may also carry cellular telephones. Emergency contact information should be posted at telephones in the shelter building.

If there is a need for medical or law enforcement, do not hesitate to call **911**. Upon securing the situation, Shelter Hosts will also contact the Shelter Coordinator to inform of the incident. In addition, the Shelter Coordinator or Host will contact the Homeless Program Manager to provide a report on the incident and actions taken.

Important Contact Information:

- Never give homeless guests the telephone numbers of any shelter hosts, the church office number, or other contact information for persons providing services within the Plan. Please provide the **211** or **503-222-5555** phone contact for 211info Referral.
- Do not confirm the existence of any current or previous homeless guest to anyone over the phone. This security/privacy is needed for all guests, and especially persons who may be fleeing domestic violence. If someone identifies himself/herself as a police officer or public official, please refer them to the Shelter Coordinator.

SEVERE WEATHER SHELTER RESPONSE PLAN FOR HOMELESS PERSONS

Hours of Operation

A minimum of two (2) Shelter Hosts will be on duty at all times of shelter operations. The Shelter Schedule is a tool for use by the Shelter Host to define the timelines and activities of shelter operations.

A template follows for your use in developing a Shelter Schedule for your specific shelter site.

SEVERE WEATHER SHELTER RESPONSE PLAN FOR HOMELESS PERSONS

SHELTER SCHEDULE [TEMPLATE]

Evening Schedule:

6:00 to 6:30 p.m. – Set-up Time

- Volunteer Shelter Hosts arrive at the shelter site to assist with room preparation.
- Shelter Hosts sign-in. May wear nametags with first name.
- Shelter Hosts complete a brief orientation with the Shelter Coordinator for that evening.
- Shelter Hosts require a volunteer disclosure be signed and on file – please provide volunteer with form if not already completed.

6:30 to 10:00 p.m. – Intake Time

- Shelter Hosts greet homeless guests.
- Shelter Hosts reviews the Shelter Guest Guidelines (rules) with the homeless guests. Give the guest a copy for his/her signature (first name is okay) indicating they understand the rules. Once the guest has signed this document, this is maintained on file. This form is only reviewed and signed once, regardless of the number of nights the guest stays in the shelter.
- Shelter Hosts asks the homeless guest to sign the Shelter Intake form.
- Shelter Hosts give the guest a tour of the building areas where they will eat, sleep, bathrooms, and where they may leave their personal belongings.

10:00 p.m.

- Lights out, please.

Morning Schedule:

6:00 to 6:30 a.m.

- Shelter Hosts begin preparing breakfast (if one is to be served).

6:30 to 7:30 a.m.

- Shelter Hosts wake up homeless guest.
- Guests are expected to pack-up their sleeping area and personal items to take with them when they leave the shelter.
- Shelter Hosts advise the guests if the shelter will be open that evening, provide intake time and other information, as necessary.
- Guests eat breakfast, if provided.

7:30 a.m.

- Guests leave the shelter.

7:30 to 8:00 a.m.

- Shelter Hosts wipe down kitchen counters and tables with bleach water.
- Shelter Hosts returns kitchen to pre-breakfast condition (clean and organized).
- Shelter Hosts sweep/mop floor areas.
- Shelter Hosts complete overnight log sheet to include volunteer hours worked, add comments about guests, or other helpful information.
- Shelter Hosts lock doors when leaving the shelter site.

SEVERE WEATHER SHELTER RESPONSE PLAN FOR HOMELESS PERSONS

STAFFING - POSITION DESCRIPTIONS

Shelter Coordinator

The Shelter Coordinator will act as primary contact for all shelter activities and be responsive to the Pastor (church shelter) or Agency Director (nonprofit or public shelter), the Shelter Hosts, and the Homeless Program Manager. Shelters may designate up to two Shelter Coordinators as primary contacts.

The Coordinator will recruit volunteers to work as Shelter Hosts, a Meal Coordinator and a Logistics Coordinator to arrange and provide shelter services.

The Coordinator will prepare and publish Appendix A activation and de-activation notices to 211info and the Homeless Program Manager. The Coordinator will maintain all recordkeeping to include signed Guest and Host documents, Intake Guest Sign-In forms, Volunteer Hours Log, and other documents as necessary. The Coordinator will provide the Homeless Program Manager with reports on number of homeless served and volunteer hour statistics.

Shelter Host

Overnight Shelter Hosts greet shelter guests and facilitate a welcoming atmosphere, provide tour of the areas to be accessible to the guests, and stay overnight at the shelter. Hosts arrive at the shelter with personal bedding and toiletries during the designated shelter set-up time. Shelter Hosts will work with the Shelter Coordinator and Meal Coordinator. The Shelter Hosts will follow the Shelter Schedule. Please refer to your shelter's specific Shelter Schedule.

For safety and visibility: Please have a minimum of two (2) shelter hosts on-site during the operation hours, with one host awake during shelter hours (may alternate sleep shifts) and located near the front of the room. Advise guests that you are here for them should they need anything in the night. Should there be an emergency, call 911.

Personal Belongings: Shelter Hosts should lock all personal belongings (e.g.- purse, computer laptop, etc.) behind closed doors or remain with the items at all times. Do not leave guests unsupervised around supply closets and lock all closets when not in use.

Supply Distribution to Guests: If the shelter is providing personal hygiene supplies, most guests have little in the way of supplies and some may be tempted to hoard the shelter's supplies. Please distribute available supplies to guests to include shampoo, soap, lotion, toothpaste, etc. Other items such as deodorant, razors, diapers, etc., can be supplied by hosts as available.

Abuse: Because of their close interaction with shelter guests, hosts may notice needs or difficulties. Be particularly alert to physical and emotional abuse of guests, especially children. Guests should be informed that physical punishment of children, name-calling, screaming at, verbally humiliating, and intimidating a child or adult are all forbidden and are grounds for ejection and/or permanent exclusion from shelter.

First Aid and Medications: Shelter Hosts should be aware of the location of first aid supplies, e.g. – band aid. No medications are to be distributed or supplied by the shelter. The shelter hosts should not attempt to administer medical treatment. Hosts are encouraged to call 911 if the guest appears to be having a medical emergency/need.

POSITION DESCRIPTIONS - CONTINUED

Permanent Exclusion From Shelter: The Shelter Hosts will advise guest(s) when they break the shelter rules and restate the shelter rule for clarity. After a series of warnings determined by shelter policy, the Shelter Host may exclude the guest if the infraction is of a serious nature to cause concern for safety of the individual, other guest and the shelter hosts. This may include incidents of disturbance to shelter operations that may lead to an unsafe environment. Any violent behavior, or behavior causing a disturbance, or behavior causing volunteers or guest to be uncomfortable or fearful for their safety should result in a 911 emergency request for police presence.

Permanent exclusions will be reported to other Shelter Coordinators within the Washington County Severe Weather Shelter network. This notice can occur via email or phone, and should only include the facts regarding name and reason for exclusion; e.g. the violation of shelter rules that created an unsafe shelter environment.

Meal Coordinator

The Meal Coordinator will arrange the necessary supplies for meals based on the activation schedule and anticipated capacity of the shelter (# of persons to feed). The Meal Coordinator will arrange for food supplies and/or prepared meals to be available for the Shelter Hosts to feed the guests.

Meals may consist of soup, sandwich items, casserole, etc. Meals should be simple to prepare, should be of nutritional value and easy to eat. Please be aware that homeless persons may have poor dental care and unable to chew hard or uncooked items; e.g. – apples, carrot sticks, etc.

Logistics Coordinator

The Logistics Coordinator will provide services in support of the shelter operations to include, but not limited to, shopping for shelter necessities, transportation, arrange special shelter set-up, etc. If a church van is available, may be responsible to coordinate pick-up and drop-off of homeless at designated locations.

SEVERE WEATHER SHELTER RESPONSE PLAN FOR HOMELESS PERSONS

APPENDICES

Severe Weather Shelter Response Plan (Appendix A)15

Volunteer Recruitment Sign-Up Form18

In Case Of An Emergency Form19

Guest Guidelines Form20

Shelter Intake and Guest Sign-in Log Form23

Shelter Signage – Open/Closed24

Washington County
**Severe Weather Shelter Response Plan
For Homeless Persons**

Objective

To provide temporary shelter to homeless persons when there is a period of “Inclement” and/or “Severe” weather during Winter months (November through March).

Inclement Weather: Harsh weather that is wet and cold where temperatures may reach 32 degrees Fahrenheit or below during Winter months (November to March).

Severe Weather: Extreme weather that poses risk to life and property that may include a special alert forecast predicting strong wind, heavy rain, frozen precipitation, or other extreme weather for a period of 24 or more hours during Winter months (November to March).

Participating Agencies and Responsibilities

- **Washington County Homeless Program Manager** manages activation/deactivation communication of severe weather shelter site (churches) with 211info, WCCCA, and HSSN **503-846-4760**
Contact: Annette Evans Annette_Evans@co.washington.or.us Fax 503-846-4795
- **HSSN Homeless Subcommittee** outreaches to faith-based and community partners to identify Severe Weather Shelter site and provide orientation.
Homeless Program Manager: Annette Evans Annette_Evans@co.washington.or.us **503-846-4760**
Interfaith Hospitality Network: Annie Heart familypromisecannieheart@gmail.com **503-844-2919**
- **Shelter Provider Organization** (Faith-based and Community Partners) providing temporary shelter from extreme weather conditions See Appendix B
- **Washington County Emergency Management Cooperative (WCEMC)** monitors weather conditions and temperatures, publishes weather reports to predefined email distribution. (WCEMC Weather Forecast)
Contact: Christopher Walsh, Christopher_Walsh@co.washington.or.us **503-846-7586**
..... Website www.wrh.noaa.gov/pqr
- **2.1.1info (Community Action I & R Staff)** maintains a list of activated Shelter Providers / Provides referrals. To access Shelter information via phone, dial **211**
Alternate Call Center # is 503-222-5555 Website <http://www.211info.org/>
- **Washington County Consolidated Communications Agency** will relay shelter information to Public Safety officials (Agency Directive 3.4.21)

Shelter Provider Organization Protocol

Shelter provider organization(s) will provide overnight shelter and meals during Inclement or Severe weather using one or both of the activation protocols:

Inclement Weather: Designated day(s) of the week to provide overnight shelter and meals for a period not to exceed local jurisdiction ordinance within the months of November through March.

Severe Weather: Based on extreme weather incidents, shelters may activate with additional days when the weather reaches 32 degrees or below for 2 or more consecutive nights and/or the extreme weather is considered life-threatening without adequate shelter from the weather.

Action Plan

Preparation (prior to weather event):

1. HSSN will engage the faith-based and community organizations to participate in providing temporary shelter services. Orientation will be provided to participating shelter provider organization on the Severe Weather Shelter Response Plan. The shelter provider organization will complete Appendix A and provide shelter site location,

SEVERE WEATHER SHELTER RESPONSE PLAN FOR HOMELESS PERSONS

- contact information, shelter capacity, hours of intake, shelter amenities, and population to be sheltered (e.g. – singles, families with children). The Service Provider Organization Directory will be updated (Appendix B).
2. Shelter provider organization contact WCEMC requesting to be added to the email distribution of the WCEMC Weather Forecast updates. Shelter provider organization will provide an email address to receive the WCEMC Weather updates and will monitor the weather for activation.
 3. WCEMC will add the shelter provider organization contact information to the email distribution.

Response (during weather event):

4. The shelter provider organization will review WCEMC weather updates received via email, the National Weather Service Forecast Office, and/or weather updates available on local TV/Radio broadcasts. Shelter provider organization will determine when their organization will open to provide shelter services to the homeless.
5. The shelter provider organization, upon determination to open as a shelter, completes activation portion of Appendix A.
6. The shelter provider organization(s) forwards a copy of Appendix A via email (preferred) or fax to the contacts at Washington County Homeless Program Manager.
7. The Homeless Program Manager will provide the information to 211*info*.
8. Washington County Homeless Program Manager will compile a list of shelter sites with amenities, and distribute the information to:
 - 8.a WCCCA non-emergency dispatch for relay to law enforcement and fire/EMS agencies in the county.
 - 8.b 211*info* to update the Call Center and website.
 - 8.c Shelter provider organizations and the HSSN email distribution.
 - 8.d Washington County Emergency Management Cooperative.
 - 8.e Interfaith Committee on Homelessness.

Deactivation (following weather event):

9. The shelter provider organization monitors weather updates and determines when to terminate shelter services by checking the deactivation box on Appendix A, list date and time of closure, and forward via email (preferred) or fax to the Washington County Homeless Program Manager.
10. Washington County Homeless Program Manager will update list of shelters to reflect deactivation and distributes information to:
 - 11.a WCCCA non-emergency dispatch for relay to law enforcement and fire/EMS agencies in the County.
 - 11.b 211*info* (Community Action I & R staff)
 - 11.c Shelter provider organizations and the HSSN email distribution.
 - 11.d Washington County Emergency Management Cooperative.
 - 11.e Interfaith Committee on Homelessness.

SEVERE WEATHER SHELTER RESPONSE PLAN FOR HOMELESS PERSONS

Appendix A

Washington County
Severe Weather Shelter For Homeless Persons

****Enter Shelter Provider Organization Name Here ****

Shelter Location: _____ (Street Address, City) _____

Pastor Name (if applicable): _____

Primary Contact Name (Day): _____

Phone Number (Day): _____

Email Address _____

Primary Contact Name (Night): _____

Phone Number (Night): _____

Email Address _____

Tri-Met Bus Route #'s: _____, _____, _____

Standard Capacity and Services

Emergency Preparedness: In the event of a major power outage/disaster, please check all that apply:

Facility has a generator backup power source.

Facility has a generator powered HVAC system.

Populations to be served (check all that apply):

Families with Children

Single Adults (18+ Years and older)

Unaccompanied Youth (Age ___ and younger)

Shelter Capacity: _____ (*# of persons, beds*)

Hours of Intake: _____ (*Days of week, times*)

Type of Bedding: _____ (*floor, cots, etc.*)

Showers: _____ (*# + shower or tub*)

Meals: _____ (*coordinated meal available, food donations, cooking facility*)

Day Use Available: _____ (*Yes or No*)

Handicap Accessible: _____ (*Yes or No*)

Accept Pets (Dogs/Cats): _____ (*Yes or No*)

Other: _____

Activate (Open) Effective Date/Time _____ (**a.m. / p.m.**)

Deactivate (Close) Effective Date/Time _____ (**a.m. / p.m.**)

Email to all: Annette_Evans@co.washington.or.us (Washington County Homeless Program Manager)

Appendix B

Washington County
Severe Weather Shelter For Homeless Persons

SERVICE PROVIDER ORGANIZATION DIRECTORY

(To be developed by HSSN Homeless Subcommittee)

BEAVERTON

Agency Name, Street Address, City

Contact Name (Day) 503-123-4567

Email@Email.com

FOREST GROVE

Agency Name, Street Address, City

Contact Name (Day) 503-123-4567

Email@Email.com

HILLSBORO

Agency Name, Street Address, City

Contact Name (Day) 503-123-4567

Email@Email.com

TIGARD

Agency Name, Street Address, City

Contact Name (Day) 503-123-4567

Email@Email.com

TUALATIN

Agency Name, Street Address, City

Contact Name (Day) 503-123-4567

Email@Email.com

9/2018

IN CASE OF AN EMERGENCY



Severe Weather Shelter - Church Name: _____

Address: _____

Church Phone: _____

Shelter Coordinator(s) Contact Information:

NAME: _____ PHONE: _____ CELL # _____

NAME: _____ PHONE: _____ CELL # _____



IN CASE OF A LIFE-THREATENING EMERGENCY: FIRE, MEDICAL, POLICE, DIAL 9-1-1



For non-emergency assistance, please dial 503-629-0111

We do not recommend that a shelter guest or a shelter volunteer transport a person to the hospital or medical clinic.

If a person is having a medical emergency, call 9-1-1. The EMT/Paramedic responders will assess the situation and determine if transportation to a medical facility is necessary.

- *Domestic Violence Crisis Line (503) 469-8620
*Washington County Family Shelter Network (503) 640-3263
*Safe Place For Youth Shelter (age 14 to 19 years) (503) 542-2717 or (503) 542-2389
*Mental Health Crisis Line (503) 291-9111

- Bonnie Hayes Animal Shelter (Animal Control) (503) 846-7041
Cab, Broadway (503) 333-3333
Cab, Yellow Cab Service (503) 272-8765
Communicable Disease Reporting Line (503) 846-3594
Environmental Health, Foodborne Illness Reporting (503) 846-8722
Family Justice Center (503) 430-8300
Hawthorn Walk-In Center1 (503) 846-4555
HomePlate Youth Outreach Worker (503) 867-4954 or (503) 867-7762
Hospital, Legacy Meridian Park (503) 692-1212
Hospital, Providence St. Vincent (503) 216-1234
Hospital, Tuality Forest Grove (503) 357-2173
Hospital, Tuality Hillsboro (503) 681-1111
Luke-Dorf Homeless Outreach Worker (503) 597-3876 or (503) 726-3736
Metro West Ambulance (503) 648-6657
Public Health After Hours Line (503) 412-2442
Veterans Community Based Outpatient Clinic - Hillsboro (503) 906-5000 / (503) 220-8262
Virginia Garcia Clinic - Beaverton / Hillsboro Locations (503) 352-6000 / (503) 601-7400

- Information and Referral Resources2 211 or (503) 222-5555 cell
Just Compassion, Walk-in Day Center,3 (503) 639-9203 (Tigard Foursquare Church) Open
Door Counseling Center Walk-in Day Center4 (503) 640-6268

1 Hawthorn Walk-In Center open 7-days a week, 9 a.m. to 8:30 p.m.
2 211 info Call Center open Monday through Friday, 8 a.m. to 6 p.m.
3 Just Compassion Day Center open Thursdays, 9 a.m. to 2 p.m.
4 Open Door Counseling Center open Monday through Friday, 9a.m. to 5p.m.

SEVERE WEATHER SHELTER RESPONSE PLAN FOR HOMELESS PERSONS

GUEST GUIDELINES - TEMPLATE

Hours: _____ p.m. to _____ a.m.

_____**(Insert Church Name)**_____ Church welcomes you to our severe weather shelter. *We hope that you will feel welcome during your stay with us. In order to ensure that everyone has a positive experience, we ask that you follow these rules. If you have any questions or special needs, particularly of an emergency nature, please ask a Shelter Host for assistance.*

The shelter will be open no earlier than _____ p.m. Please do not arrive prior to this time. Exterior building doors are locked at _____ p.m. All guests must be at the church by _____ p.m. unless other shelter accommodations have been arranged.

Smoking is not allowed inside the building or within 10 feet of the building entrance.

Drugs and Alcohol - Absolutely no drugs or alcohol are to be consumed or stored, on or off the shelter grounds by any guest. All guests must be clean and sober of all drugs and alcohol before entering the program. If we suspect alcohol or drug use, you will be asked to leave. If you refuse to leave, we may call 911 for assistance.

Weapons - No weapons are allowed on the church property.

Pets - Guests are not allowed to have pets of any kind in the building, with the exception of service animals.

Harassment - No threats or acts of violence will be tolerated in any way. Any attempt to impose your will on another is an act of violence. Harassment in any form (whether it is verbal, physical, emotional, mental, or sexual) will not be tolerated, nor will aggressive or intimidating behavior of any kind be tolerated.

Discipline of children must be non-violent. Physical, verbal, mental, or emotional abuse of children is not acceptable and will not be tolerated. Examples of abuse include pinching, slapping, hitting, spanking, biting, name calling, swearing, etc. Staff is required by law to report any suspected child abuse or neglect. If you have questions or concerns about this, please ask staff.

Meal - A meal is available at _____ p.m. Please keep food and drinks in the kitchen or eating area, except baby bottles.

Public Areas - Appropriate attire must be worn at all times. All guests must be dressed properly. This means you must be fully clothed. For your protection, shoes must be worn.

Lights Out - Lights out at 10:00 p.m. and all guests are to stay in the sleeping area. If for any reason you have to leave the building in the night (other than to smoke), you will not be let back inside without permission from the Shelter Hosts.

Designated Areas - Please stay in the designated guest areas of the building. You will be provided tour of these areas. Please only sleep in areas designated for sleeping.

Child Supervision - Parents are responsible for the supervision of their children. No children should be left unattended. Young children should go to the restrooms only with their parents. Please do not place inappropriate items (diapers, paper towels, wipes, etc.) in the toilets. Please accompany your children to the restrooms.

General Information

- * Guests need to clean up after themselves or ask a volunteer for assistance.
- * A telephone is available for brief, local calls.
- * The shelter is not responsible for lost or stolen items.
- * Guests are welcome to use the sanctuary for prayer or reflection.

Shelter Hosts will wake you at _____ a.m. Please get up and immediately eat breakfast provided by the Shelter Hosts. You will need to put away your sleeping mats and bedding to take with you as you leave. It is important that you be ready to promptly leave the church shelter by _____ a.m.

I understand and agree to follow the rules of this church/agency shelter. I understand that failure to do so may result in my being asked to leave the building and grounds.

Name

Name

Signature

Signature

Date: _____

SEVERE WEATHER SHELTER RESPONSE PLAN FOR HOMELESS PERSONS

REGLAS PARA

Hours: _____ p.m. to _____ a.m.

_____ (Insert Church Name) le da la bienvenida a nuestro refugio de clima severo. *Esperamos que se sienta bien durante su estancia con nosotros. A fin de que toda persona tenga una experiencia positiva, pedimos que siga estas reglas. Si tiene alguna pregunta o necesidades especiales, particularmente de carácter de emergencia, por favor pidan a un anfitrión del refugio para asistencia.*

El refugio estará abierto a las _____. Por favor, no lleguen antes de esta hora. Las puertas exteriores del edificio están bloqueadas durante a las _____. Todos los huéspedes deben estar en la iglesia a las ____ a menos que se organicen otras adaptaciones de refugio.

Fumar-No está permitido fumar dentro del edificio o dentro de 10 pies de la entrada del edificio.

Drogas y alcohol - absolutamente ningún tipo de drogas o alcohol podrán ser consumidos o almacenados, dentro o fuera de la propiedad del refugio por ningún invitado. Todos los huéspedes deben estar limpios y sobrios de todas las drogas y alcohol antes de entrar en el programa. Si nosotros sospechamos uso de alcohol o drogas, se le pedirá salir del refugio. Si usted se niega a abandonar el refugio, llamaremos 911 para asistencia.

Armas - No se permiten armas en la propiedad de la Iglesia.

Las mascotas - Invitados no deben tener ningún tipo de mascotas o animales domésticos en su compañía dentro o fuera del edificio o en la propiedad, a menos que los animales de servicio.

Acoso - No amenazas o actos de violencia serán tolerados en modo alguno. Cualquier intento de imponer su voluntad en otro es un acto de violencia. No se tolerará el acoso en ninguna forma (ya sea verbal, físico, emocional, mental o sexual), ni se tolerará el comportamiento agresivo o intimidante de ningún tipo.

Disciplina de los niños no debe ser en forma violenta. Abuso físico, verbal, mental o emocional de los niños no es aceptable y no será tolerado. Algunos ejemplos de abuso indebido son: pellizcar, palmadas, golpear, azotes, morder, llamada de nombre, jurar, etc... Personal se requiere por ley informar de cualquier sospecha de abuso infantil o descuido. Si tiene preguntas o preocupaciones acerca de esto, pida ayuda al personal.

Comida - Una comida está disponible a las _____ p.m. Por favor, tenga alimentos y bebidas en la cocina o área alimentarias solamente, excepto biberones.

Áreas Públicas - vestidura apropiada es obligatoria en todo momento. Todos los huéspedes deben estar vestidos correctamente. Esto significa que debe estar totalmente vestido. Para su protección, hay que llevar zapatos.

Luces apagadas- Luces serán apagadas a las 10: 00 p.m. y todos los huéspedes deberán permanecer en el área para dormir. Si por cualquier razón tiene que dejar el edificio (salvo que fuman) en la noche, usted no se permitirá volver a entrar sin permiso de la persona encargada o (anfitrión) del refugio.

Áreas designadas - Por favor durante su estancia permanezca en las áreas designadas para invitado en el edificio. Se le proporcionará recorrer las áreas bajo supervisión. Por favor, sólo duerman en zonas designadas para dormir.

Supervisión Infantil- Padres son responsables de la supervisión de sus hijos. Ningún niño debería dejarse desatendido. Los niños pequeños deberán ir a los baños sólo con sus padres. Por favor no coloque elementos inadecuados (pañales, toallas de papel, etc.) en los retretes. Por favor, acompañe a sus hijos cuando necesiten ir al baño.

Información general * invitados deben recoger sus propiedades o pedir a un voluntario por asistencia. Un teléfono está disponible para las llamadas breves y locales. El refugio no es responsable de elementos perdidos o robados. * Huéspedes son bienvenidos a utilizar el santuario para orar, reflexionar, o meditar.

SEVERE WEATHER SHELTER RESPONSE PLAN FOR HOMELESS PERSONS

La persona en cargada (anfitrión) del refugio le despertara a las ____ . Por favor, levantarse e inmediatamente pase a tomar el desayuno proporcionado por el refugio. Deberá recoger y limpiar el lugar donde durmió y dejarlo en la condición en que se le fue entregado. Es importante que usted este listo para alojar sin demora el refugio de la iglesia a _____ .

Comprendo y estoy de acuerdo con las reglas de este refugio de Iglesia/Agencia. Entiendo que al no hacerlo puede resultar en que se me pida abandonar el edificio y la propiedad.

Nombre

Nombre

Firma

Firma

Fecha: _____

SEVERE WEATHER SHELTER RESPONSE PLAN FOR HOMELESS PERSONS

SHELTER INTAKE AND GUEST SIGN-IN LOG - TEMPLATE

SHELTER HOST SITE:		DATE OF INTAKE:				
NAME OF GUEST (one individual per line)	BIRTH YEAR (example 1962)	TIME IN	TIME OUT	REVIEW RULES	GAVE TOUR OF BUILDING	NOTES/COMMENTS
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						

SHELTER SIGNAGE - TEMPLATE

SEVERE WEATHER SHELTER OPEN

Forest Grove United Church Of Christ



**Shelter services are available
6:00 p.m. to 6:00 a.m.**



For Washington County shelters and other shelter
resources within the Metro area,
dial **211** or **503-222-5555**.

Refugio de Clima Severo

Abierto

Forest Grove United Church Of Christ



**Servicios del refugio están disponibles
6:00 p.m. to 6:00 a.m.**



Refugios en el Condado de Washington y otros
refugios y recursos en la área metro,
Marque **211** o **503-222-5555**.

SHELTER SIGNAGE - TEMPLATE

SEVERE WEATHER SHELTER

CLOSED

PLEASE COME BACK LATER

Forest Grove United Church Of Christ



**Shelter services are available
6:00 p.m. to 6:00 a.m.**



For Washington County shelters and other shelter
resources within the Metro area,
dial **211** or **503-222-5555**.

Refugio de Clima Severo

Cerrado

Por favor regrese mas tarde

Forest Grove United Church Of Christ



**Servicios del refugio están disponibles
6:00 p.m. a las 6:00 a.m.**



Refugios para el Condado de Washington y otros
refugios y recursos en la área metro
marque **211** o **503-222-5555**.

Exhibit H

MMC Chapter 10

10.819A Temporary Shelters

(A) Purpose and Intent.

Temporary shelters provide short-term relief for homeless individuals and families, as well as those without adequate protection during times of extreme weather, within an existing or newly constructed building. It is the intent of these standards to ensure that any conflicts with temporary shelters and the surrounding land uses are mitigated through the special regulations set forth in this Section 10.819A.

(B) Definitions Pertaining to Temporary Shelters.

When used in Chapter 10 in reference to temporary shelters, the following terms shall have the meanings as herein ascribed:

- (1) Access Point: The main point of entry and exit for a temporary shelter where users, visitors, and other persons must sign in and out to maintain security within a shelter.
- (2) Client(s): Person or persons who receive services from an operator of a temporary shelter which shall include overnight sleeping, and may include other items established per the shelter's operations plan as required in Section 10.819A(D)(1)(b).
- (3) Operator: The organization in charge of daily operations of a temporary shelter. The operator shall be a civic, non-profit, public, religious, membership based, or otherwise competent organization and shall be the applicant for the land use review of a temporary shelter.
- (4) Operational Period: An operator's established days of operations.
- (5) Operations Plan: The guiding document for an operator to use in determining the standards clients must adhere to in a shelter.
- (6) User(s): See 10.819A(B)(2) client(s).

(C) Temporary Shelter Permit Requirements

- (1) The conditional use permit (CUP) as required by Sections 10.314 and 10.337 of this Code shall run with the lot(s), tract(s), or parcel(s) of land on which a temporary shelter was conditionally permitted. Unless modifications to the original CUP are made, a new CUP shall not be required for each new operational period.
- (2) An operator of a temporary shelter shall comply with all applicable local, state, and federal laws, rules, and regulations (e.g. Building and Fire Department approvals) unrelated to land use applications/reviews, unless waived by the appropriate approving authority/official.
- (3) Upon request by the applicant, the Planning Director may reduce or waive application fees and any other fees required by the Planning Department. In evaluating such a re-quest, the Director will consider the financial hardship to the applicant and other information relevant to the cost of processing the application and/or the applicant's ability to pay the fees.
- (4) In order to begin operating a temporary shelter, an operator shall apply for and receive an approved Temporary Shelter Operational Permit from the Medford Fire-Rescue Department for each operational period.
- (5) Shelters operating with extensions, granted per Section 10.819A(D)(2)(e), shall be required to perform all improvements, acquire all permits, and fulfill all other requirements of the Medford Municipal Code, unless waived by the appropriate approving authority.
- (6) All applicable permits must be approved prior to the initial date of operations.
- (7) Each temporary shelter shall adhere to the Temporary Shelter Policy as established by the City.

(D) General Standards for Temporary Shelters

The following standards of subsection 10.819A (D) shall apply to temporary shelters. The words operator and applicant may be used interchangeably in this subsection as they are one and the same. The requirements are as follows:

- (1) Operational Requirements. The operator shall be required to meet the following standards as it pertains to shelter operations:
 - (a) Conformance. It shall be the duty of the operator to ensure and maintain compliance with applicable local, state, and federal regulations relating to the operations of

temporary shelters. Temporary shelters shall comply with all applicable building, fire, health, life, and safety codes as they pertain to temporary shelters. Compliance with this section requires the Operator maintain a Temporary Shelter Operational Permit.

(b) Operations Plan. An operations plan shall be required for a temporary shelter. An operations plan shall include, at a minimum, items addressing client interaction, rules for shelter use, facility operations and maintenance, safety and security provisions, signage that complies with the Medford Municipal Code, and the dates of the operational period. (c) Supervision. There shall be a minimum of two on-duty representatives of the temporary shelter at any time, unless approved otherwise. The representative(s) contact information shall be clearly posted at the shelter's access point each day. The representative may be a volunteer, hired employee, or otherwise competent and responsible adult.

i. When required by Medford Fire-Rescue, a fire watch shall be in place in addition to an on-duty representative(s).

ii. On duty-representatives shall monitor all areas of a temporary shelter, in order to ensure that all applicable rules are being followed.

(d) Shelter Capacity. Shelter capacity shall be determined by applicable Building and Fire Codes.

(e) Areas for Sleeping. Temporary shelters may have separate and designated areas for sleeping or shelter for the comfort of clients by separating clients into male only, female only, and family only sleeping areas.

(f) Shelter queuing. During times of shelter intake lines or queues of people awaiting admittance shall not obstruct any public space or right of way. A three foot clearance shall be maintained on all sidewalks.

(g) Written proof of compliance with requirements of this Section shall be available in hard copy at the temporary shelter's access point and shall also be made available to the Fire Code Official, upon request.

(h) Operational Requirements stated in this Section may be conditions of approval as deemed necessary by the approving authority.

(2) Operational Period.

(a) The use of a temporary shelter shall not exceed 90 days within a 12 month period, unless otherwise permitted by this code. The operational period shall start on the first day of operations in which individuals were provided shelter and shall end once shelter has been provided for 90 days within a 12 month period or 12 months after the first day of operations, whichever occurs sooner.

(b) The intended timeframe in which an operational period is to take place shall be clearly stated in an operations plan. This shall include one of the following:

i. Operations based on local weather events such as, but not limited to, temperature extremes, persistent smoke or fog, and other acts of nature that are hazardous to human health. Conditions for opening and closing based on weather events shall be clearly stated in the operations plan.

ii. Specific dates in which operations are to occur, not exceeding 90 days in a 12 month period as identified in this Section, subject to the 180 day limitation for Temporary Uses described in 10.819A(D)(2)(e) below.

(c) The operator shall notify Medford Fire-Rescue each time the shelter is closing.

(d) The operator shall notify Medford Fire-Rescue a minimum of four business days prior to each re-opening of the shelter and shall provide the opportunity for inspection prior to re-opening the shelter. In times of emergency the operator shall coordinate with Medford Fire-Rescue if it is not possible or prudent to give four days' notice.

(e) The operational period may be extended for a temporary shelter by the City if local conditions warrant an extension. Extensions may be granted for a total of 30, 60, or 90 calendar days. Extensions shall be approved by the City Manager. The total operational period, including extensions, shall not exceed a total of 180 consecutive days, in a 12 month period. Extensions are subject to the following conditions:

- i. Operators must request to extend the operational period a minimum of 14 business days prior to the first anticipated day of extended operations.
- ii. An extension of the operational period for a temporary shelter may require additional conditions that were not previously required. Additional conditions shall be consistent with applicable Building and Fire Codes, unless otherwise waived by the appropriate approving authority or the City Manager.

(f) The limitations on the length of operational periods shall apply to the lot(s), tract(s), or parcel(s) of land on which a temporary shelter operates.

(3) Reporting Requirements. Within 30 days of the end of the operational period, and/or upon application for an extension to the operational period pursuant to section 10.819A(D)(2)(e), the operator shall submit a report to the Housing Advisory Commission (HAC). At a minimum, the report shall include the following information:

- i. Number of clients served at the temporary shelter during the operational period
- ii. Number of public service calls to the temporary shelter and reason for each call
- iii. Services provided to the clients of the temporary shelter, if applicable
- iv. Number of nights spent at full capacity (if applicable)
- v. Number of clients from the operational period who were provided with more permanent or transitional housing

The operator shall coordinate the reporting requirement with the Medford, Ashland/Jackson County Continuum of Care using the industry standard software (e.g. Homeless Management Information System) in place at the time of reporting.

(4) Standards for Closing/Suspending Temporary Shelters

The City shall consider the reports submitted by operators to the HAC in determining whether to close or suspend a temporary shelter. A shelter may be closed or suspended in accordance with the following procedures and criteria.

- (a) The City may close or suspend a temporary shelter use if:
 - i. The City Manager has determined that it would be in the public interest to do so.
 - ii. More than 40 emergency service calls within 30 calendar days are made regarding activity in or near the temporary shelter.
 - iii. Any safety issues are identified during an inspection, including, but not limited to fire and life safety issues.
 - iv. Any violation of the Medford Municipal Code and/or state or federal law occurs.

(b) Any day on which the temporary shelter is closed or suspended due to non-compliance with applicable codes, laws, or rules shall not count as a day of the operational period. Closing of a temporary shelter under this section invalidates all temporary shelter permits for the tax lot(s) on which the shelter is located, including temporary shelters in other buildings on the same tax lot, but does not invalidate a conditional use permit issued pursuant to Section 10.184 of this Code.

(c) When a temporary shelter is closed or suspended due to violation of the standards outlined in this Section, it shall not be allowed on the same tax lot(s) for a time period of one year (365 days) from the final day of operations, unless otherwise approved by the City Council.

(d) Clients of a temporary shelter, the operator, and the property owner shall be given seven calendar days for the operator and owner to remove temporary shelter components, and for clients to vacate the location in which a shelter operates, once the use has been terminated. In cases of emergency or threat to human health or life safety, less than seven days' notice may be given. The owner or operator shall not be required to remove components utilized for the temporary shelter that are also part of the owner or operator's routine operations.

(e) The City Manager's decision to revoke a temporary shelter's permits shall be effective immediately. Appeals shall be made to the City Council.

(5) Consent to Inspection of Temporary Shelter(s)

- (a) Temporary shelters are subject to inspection at any time by the City to verify safe operation of a shelter.

i. Inspections by the City may include inspections of all portions of a temporary shelter. Inspections shall be in conformance with all applicable local, state, and federal laws.

ii. Areas used for bathrooms and showers shall be subject to inspections by the City, but any users of the facilities shall be given ten minutes notice prior to inspection to allow for the privacy needs of individuals who may be using the facilities.

(b) Inspections shall be required prior to each opening of a temporary shelter. All violations of applicable codes found through an inspection shall be resolved prior to commencing operations of a temporary shelter. Inspections may be required by the following City departments to verify conformance with applicable codes, prior to operations commencing:

- i. Building Department
- ii. Planning Department
- iii. Police Department
- iv. Fire-Rescue Department

(c) Each user of temporary shelter must sign a waiver and give consent to inspections from the departments listed in this Section for reasons deemed necessary to ensure safe operations of a temporary shelter. This waiver shall include consent to walk-through inspections of sleeping areas as well as inspections of the facility. This shall be a part of the operations plan and may differ from shelter to shelter.

(d) Signage stating "Inspection by the City of Medford officials, including Medford Fire-Rescue and Medford Police Department, may occur without notice" shall be prominently posted in the sleeping units, shower areas, and toilet areas of the temporary shelter.

(E) Site Standards for Temporary Shelters

The following standards shall apply to the development and use of temporary shelters.

(1) Temporary shelters must be at least 500 feet, measured from any property line, from any other temporary shelter's closest property line. This Section applies to temporary shelters during their operational period, not for land use approvals.

(2) Temporary shelters shall be an accessory use in residential zones.

(3) In commercial and industrial zones, temporary shelters may be an accessory or primary use.

(4) A site plan depicting how the standards of Section 10.819A of this Code have been met shall be submitted as a part of the application submittal. A site plan shall, at a minimum, include the following:

(a) Building footprint(s) of the primary and accessory uses on the site in which the temporary shelter will be located.

(b) A floor plan, with square footage measurements labeled clearly for:

- i. The location and size of the temporary shelter and areas intended for sleeping
- ii. Location and size of other areas used in conjunction with the warming shelter (e.g. common area(s), kitchen(s), bathroom(s), and similar spaces).
- iii. Total client capacity within the temporary shelter and areas intended for sleeping

(c) Location of buildings access point(s)

(d) Location(s) of trash receptacle(s)

(e) Location(s) of lighting for site and building(s)

(5) Adequate space shall be provided for client's personal items and shall not displace required parking per Sections 10.741-10.751.

(6) Access points shall have a trash receptacle that does not block the public right of way and is large enough for trash disposal during times of intake.

(7) Adequate access shall be given for emergency vehicles and personnel, where applicable.

(8) Tents, yurts, and similar temporary structures are not allowed to be used for the temporary shelter land use.

[Added Sec. 7, Ord. No. 2018-113, Sept. 20, 2018.]

Exhibit I

MMC Chapter 12

12 Emergency Management Responsibility

12.010 Title

This chapter may be cited as the Medford Emergency Management Code.

12.020 Purpose

The purpose of this chapter is to reduce the vulnerability of the city and its residents to loss of life, injury to persons or property, human suffering and financial loss resulting from emergencies, and to provide for recovery and relief assistance for the victims of emergencies.

12.030 Definitions

The following words and phrases whenever used in this chapter shall be construed as defined in this section unless from the context a different meaning is intended.

(1) "Emergency" includes any human caused or natural event or circumstances causing or threatening loss of life, injury to person or property, human suffering or financial loss, and includes, but is not limited to, fire, explosion, flood, severe weather, earthquake, spills or releases of oil or hazardous material, contamination, disease, civil disturbance, terrorism, riot, or the interruption of essential public services.

(2) "Emergency Management Plan" means that plan approved by the city manager pursuant to Section 12.040 of this code.

(3) "City manager" means the city manager or manager's designee.

12.040 City Manager Responsibility

The city manager or manager's designee is responsible for preparation and implementation of the Emergency Management Plan. The Emergency Management Plan shall provide policies and procedures for city response to and management of emergency situations and for the use of the powers delegated to the city manager by this chapter. The plan shall, at a minimum, provide for the following:

(1) Emergency command and coordination of the appropriate response actions;

(2) Communication systems; and

(3) Departmental responsibilities and procedures.

12.050 Declaration and Ratification of Emergency by Mayor and City Council

(1) When the Mayor determines that a state of emergency exists, the Mayor shall make a written declaration to that effect, and within 24 hours, call a special meeting of the City Council to ratify the declaration of emergency, or if a quorum of the council is not available, then as soon as a quorum can be assembled. If the Mayor, for any reason, is unable or unavailable to perform these duties, then the duties shall be performed in the following order of succession:

- (a) City Council President;
- (b) City Council Vice President; and
- (c) City Council members in order of seniority in office.

(2) The declaration by the Mayor of a state of emergency shall:

- (a) State the nature of the emergency;
- (b) Designate the geographical boundaries of the area subject to the emergency procedures;
- (c) State the duration of time during which the area so designated shall remain an emergency area; and
- (d) State any special regulations imposed as a result of the state of emergency.

(3) All orders issued pursuant to this chapter shall have the full force and effect of law during a state of emergency. All existing laws, ordinances, rules and orders inconsistent with this chapter shall be inoperative during the period of time and to the extent such inconsistencies exist.

12.060 Emergency Management Procedures

During a declared emergency, the city manager in the interest of the public health, safety and general welfare, in any area designated as an emergency area, shall be responsible for the following procedures:

- (1) Exercise all police powers vested in the city by the Oregon Constitution, city charter and city ordinances in order to reduce the vulnerability of the city to loss of life, injury to persons or property, human suffering and financial loss resulting from emergencies, and to provide for recovery and relief assistance for the victims of emergencies;
- (2) Direct any department of the city to utilize and employ city personnel or individuals appointed by the manager, equipment, and facilities for the performance of any activities designed to prevent or alleviate actual or threatened damage due to the emergency, and may direct the departments to provide services and equipment to federal, state or local agencies to restore any services in order to provide for the health and safety of the citizens of the city;
- (3) Designate persons to coordinate the work of public and private relief agencies operating in such area;
- (4) Request the aid and assistance of any state or other public or quasi-public agencies in the performance of duties and work attendant upon the emergency conditions in such area;
- (5) Clear or remove from publicly or privately owned land or water, debris and wreckage which may threaten public health or safety, or public or private property. In exercising this responsibility the city manager may:
 - (a) Accept funds from the federal government, the state of Oregon or other public or private organizations for the purpose of removing debris or wreckage from publicly or privately owned land or water; and
 - (b) Provide to the state of Oregon or others permission for removal of such debris or wreckage

from publicly or privately owned land or water;

- (6) Redirect city funds for emergency use and suspend standard city procurement procedures;
- (7) Order the evacuation of persons;
- (8) Accept or borrow funds from or passed through by the state of Oregon for temporary housing for disaster victims;
- (9) Enter into purchase, lease or other arrangements with any agency of the United States or the state of Oregon, Jackson County Housing Authority or private owners for temporary housing units to be occupied by disaster victims;
- (10) Apply to the federal and state government, or request the state to apply on the city's behalf, for grants and loans and to receive, on behalf of the city, such grants and loans; and (11) Determine the financial resources required to restore or resume the city's governmental functions, and to certify the same to the state of Oregon or the federal government.

12.070 Termination of State of Emergency

The state of emergency proclaimed by the Mayor may be terminated at any time by resolution of the city council.

12.080 Due Process

Any person claiming a deprivation of liberty or property by any order of the city manager pursuant to this chapter shall be entitled to a hearing before the Municipal Court judge. The hearing shall be held as soon as practicable after execution of the questioned order. The aggrieved party shall have the right to appear in person and/or by counsel and may present evidence to support his/her grievance. The city shall present evidence in support of its action. The judge shall determine whether the questioned action was lawful and proper, and shall be empowered to restore any property or other rights of which the grievant was unlawfully deprived. The judge shall not have authority to award or deny monetary compensation or damages. Claims for compensation or damages shall be made in the manner otherwise provided by law. The city or any aggrieved party shall have the right to appeal the judge's decision. Such appeal shall be taken and perfected in the manner provided by law for taking appeals from justice courts and as prescribed in ORS 221.350.

12.090 Penalty

Violation of any provision of chapter 12 of this code and of any orders issued pursuant to this chapter shall be a crime punishable by a fine not exceeding \$500 and imprisonment not exceeding 30 days.