

2013 Training and Exercise Needs Assessment

North Dakota Department of Emergency Services
Division of Homeland Security



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Background

In February-March 2013 a training and exercise needs assessment was conducted via the ND Department of Emergency Services Training and Exercise website. Emergency planners and responders from a wide variety of disciplines, at the local and state level were contacted through email distribution lists and invited to participate in the survey. Participation in the survey was totally voluntary. Anyone visiting the ND DES website had access to the survey and may have participated without having received an email invitation. No personal identifiers were requested from participants and no additional communication with potential participants was attempted after the initial invitation to participate.

The purpose of this survey and subsequent analysis of data was to determine areas of training interest, optimal times for training to occur, desired frequency of training, and travel limitations. The information gathered will be considered in the development of a training plan and schedule for the coming 18-24 months with the goal of increasing participation and decreasing the number of classes that are cancelled due to low registrations.

Survey results will be reported either as a percentage of responder that selected a particular value or as score means for indicators that were ranked on scale of 1 to 5 with 1 representing the least desirable or lowest score, and 5 representing the most desirable or highest score.

Demographics

One hundred twelve (112) surveys were completed by participants from local emergency management, state agencies, emergency medical services, fire suppression, law enforcement, medical facilities, public health, city government, public service access points (PSAPs), tribal emergency management, national guard, and private emergency preparedness consultants. Of those respondents, 77.3% indicated that they are employed full time; 15.5% are volunteers; and 6.4% are employed on a part time basis. The vast majority of responders (85%) indicated that they have more than five years of experience in their field. Those with more than twenty years' experience account for 36.4% of survey participants. Ten to twenty years' experience was cited by 23.6%; five to ten years' experience accounts for 25.5%; and 14.5% represent those with less than five years' experience in their field.

Travel

North Dakota is a rural state of 68,976 square miles making travel a significant factor in training and exercising of emergency responders. Frequently, participation in a training event requires an overnight stay and the expenses associated with mileage, food, and lodging. Therefore, we wanted to know how our participants felt about the distances they may be asked to travel to attend training. We asked them to indicate how far they were willing to travel for a class that they felt would be beneficial to them. The majority indicated a willingness to travel less than 50 miles (32.7%). There was, however, a significant variation between disciplines in willingness to travel. Local emergency managers were willing to travel the greatest distance with 77% indicating a willingness to travel more than 100 miles. Medical facility staff was the least willing to travel with 92% indicating a willingness to travel no more than 100 miles.

Table 1 shows the percent of survey participants willing to travel various distances by discipline.

Table 1

Discipline	Travel Distance			
	Less than 50 Miles	51-100 Miles	101-200 Miles	More than 200 Miles
All (n=112)	32.7%	22.7%	29.1%	15.5%
Local EM (n=26)	7.7%	15.4%	61.5%	15.4%
State Agencies (n=23)	47.8%	13.0%	8.7%	30.4%
EMS (n=10)	30.0%	30.0%	40.0%	0%
Fire (n=16)	37.5%	37.5%	12.5%	12.5%
Law (n=13)	23.1%	15.4%	46.2%	15.4%
Medical Facility (n=13)	53.8%	38.5%	7.7%	0%
Public Health (n=3)	33.3%	33.3%	33.3%	0%
Other (n=8)	37.5%	12.5%	12.5%	37.5%

Frequency of Classes

A strong majority (72%) of respondents favored training opportunities quarterly or more often. This trend also holds true when data is analyzed by discipline, with the exception of medical facility respondents whose majority (54%) favored once or twice per year training. Because the sample size of medical facility respondents is small (N=13) educators may want to conduct additional surveys to increase sample size. If future surveys support these results, educators would want to consider grouping critical training for this audience. See Table 2 for additional results regarding frequency of classes.

Table 2

Discipline	Frequency of Classes					
	Once/year	Twice/year	Three/year	Quarterly	Every Other Month	Monthly
All (n=112)	7.35%	11.8%	9.1%	30%	16.4%	25.5%
Local EM (n=26)	0%	7.7%	3.8%	38.5%	30.8%	19.2%
State Agencies (n=23)	13%	4.3%	13%	17.4%	13%	30.4%
EMS (n=10)	0%	0%	0%	30%	20%	50%
Fire (n=16)	6.25%	6.25%	18.75%	18.75%	18.75%	31.25%
Law (n=13)	7.7%	0%	23.1%	46.1%	15.4%	7.7%
Medical Facility (n=13)	23.1%	30.8%	0%	15.4%	0%	30.1%
Public Health (n=3)	0%	0%	0%	66.6%	0%	33.3%
Other (n=8)	0%	37.5%	12.5%	37.5%	0%	12.5%

Type of Study

Technology has provided options when it comes to how training is delivered to adult learners. On-line classes and interactive video conference options join the traditional classroom and self-study methods. Survey participants were asked to rank each method on scale of 1 to 5 (with 1 being the least and 5 being the most) based on how likely they would be to participate in classes using the various delivery methods. *Table 3* displays the responses. Considering the level of experience previously identified by the survey respondents (and loosely correlating years of experience to age) it is not surprising that classroom training is still preferred. It is noteworthy that on line and videoconference options are also highly acceptable methods of training to the participants of the survey.

Table 3

Discipline	Type of Study			
	On line	Self-Study Written	Interactive Video	Classroom
All (n=112)	3.79	3.11	3.59	4.07
Local EM (n=26)	3.96	3.31	3.88	4.27
State Agencies (n=23)	4.00	3.39	3.74	3.91
EMS (n=10)	3.10	2.60	3.20	3.90
Fire (n=16)	3.06	3.06	3.38	4.38
Law (n=13)	3.38	2.46	3.23	4.23
Medical Facility (n=13)	4.46	3.00	3.69	3.00
Public Health (n=3)	4.33	4.33	4.33	4.67
Other (n=8)	4.25	3.13	3.25	4.75

Length of Class

We asked survey participants to rank class length of 1-2 hours, 2-4 hours, 8 hours, 2 days, 3 days, and 1 week on scale of 1 to 5. As demonstrated in *Table 4*, classes of 1 day or less are preferred. Participant's acceptability of classes longer than 1 day drops off as class length increases. No significant variance is noted for any specific discipline.

Table 4

Discipline	Length of Class					
	1-2 Hours	2-4 Hours	8 Hours	2 Days	3 Days	1 Week
All (n=112)	3.84	4.02	3.83	3.13	2.45	2.04
Local EM (n=26)	4.31	4.42	4.08	3.62	2.62	1.85
State Agencies (n=23)	3.96	3.74	3.52	3.04	2.57	2.57
EMS (n=10)	4.10	4.10	3.30	3.00	2.20	2.00
Fire (n=16)	3.81	3.88	4.00	2.69	2.31	1.75
Law (n=13)	3.46	4.15	4.62	3.92	3.15	2.92
Medical Facility (n=13)	3.62	3.46	3.08	2.23	1.31	1.08
Public Health (n=3)	3.33	3.67	4.00	3.00	3.00	2.67
Other (n=8)	2.88	4.50	4.13	3.13	2.63	1.63

Schedule Preferences

The next three tables address the best times to schedule training in North Dakota. We know that our four weather seasons provide challenges such as winter weather resulting in limited travel, and spring flooding resulting in emergency response activities. In addition, ND is an agricultural state and many volunteers, part time, and full time employees are engaged in farming in some way. Spring planting and fall harvest are the busy times of the year for farmers. Another traditional activity is hunting which is primarily a fall activity. For these reasons, we surveyed participants about the months of the year they were most likely to participate in training. See *Table 5*.

Table 5

Discipline	Months of Year											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
All (n=112)	3.58	3.62	3.46	3.38	3.21	3.09	2.86	2.79	3.32	3.58	3.58	2.94
Local EM (n=26)	3.81	3.73	3.46	3.19	3.54	3.65	3.46	3.35	3.73	4.15	4.00	3.31
State Agencies (n=23)	3.87	3.96	3.65	3.35	3.13	2.91	2.87	2.78	3.09	3.61	3.57	3.35
EMS (n=10)	2.90	3.10	3.10	2.70	2.70	2.10	1.70	1.60	3.40	3.00	2.90	2.30
Fire (n=16)	3.69	3.88	3.88	3.19	2.81	2.88	2.94	2.50	2.56	2.75	3.25	3.25
Law (n=13)	3.38	3.54	3.69	4.46	3.15	3.54	3.08	3.15	3.77	3.62	3.62	2.85
Medical Facility (n=13)	2.85	2.69	2.62	3.54	3.46	3.31	2.62	3.00	3.31	3.38	3.23	1.77
Public Health (n=3)	3.67	3.33	4.33	4.67	4.67	4.00	3.67	3.00	4.00	4.67	4.67	4.33
Other (n=8)	4.13	4.13	3.25	2.88	3.00	2.00	1.88	2.13	3.13	3.88	3.88	2.25

We also asked participants to rate the days of the week according to how likely they would be to attend classes on each day. The results for days of the week are found in *Table 6*.

Table 6

Discipline	Day of Week						
	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
All (n=112)	1.74	3.05	3.64	3.77	3.99	2.94	2.02
Local EM (n=26)	1.54	2.73	3.54	3.92	4.65	3.12	1.69
State Agencies (n=23)	1.57	3.43	4.17	4.00	3.96	2.96	1.70
EMS (n=10)	2.10	3.40	2.90	3.70	3.30	2.50	2.80
Fire (n=16)	2.69	2.94	2.81	3.06	3.25	2.81	3.75
Law (n=13)	1.69	3.31	3.77	3.85	4.23	3.08	1.69
Medical Facility (n=13)	1.08	2.23	4.15	3.62	4.00	2.62	1.08
Public Health (n=3)	2.00	4.00	4.67	4.33	3.67	3.67	2.00
Other (n=8)	1.63	3.38	3.63	4.00	4.00	3.13	1.63

Table 7 shows the percentage of participants that indicated the best time of the day for training as morning, afternoon, and evening respectively. Traditionally, most training has been scheduled for day time business hours. We wanted to know if evening classes would be preferred for any disciplines, especially as many rural responders are volunteers with commitments to a “day job”. Most responders prefer day time hours for training, however; in the fire discipline 54% indicated a preference for evening hours.

Table 7

Discipline	Time of Day		
	Morning	Afternoon	Evening
All (n=112)	57.3%	33.6%	9.1%
Local EM (n=26)	65.4%	34.6%	0%
State Agencies (n=23)	65.2%	34.8%	0%
EMS (n=10)	40%	30%	30%
Fire (n=16)	31.25%	25%	53.8%
Law (n=13)	53.8%	46.2%	0%
Medical Facility (n=13)	69.2%	30.8%	0%
Public Health (n=3)	66.6%	33.3%	0%
Other (n=8)	62.5%	37.5%	0%

Courses/Topics

The survey asked participants to rank courses or topics according to their interest using the scale of 1 to 5 with 1 being the least amount of interest and 5 being the most interest. Included were classes that have traditionally been part of the ND DES curriculum, courses required for emergency management certification, courses available to be presented locally by the Emergency Management Institute (EMI), state level courses approved by EMI, Incident Command System/National Incident Management System courses, and miscellaneous courses on topics of known ND hazards, recent disasters, and “hot” topics.

Tables 8, 9, and 10 display the mean score of the resulting rankings.

Table 8

Discipline	Courses									
	Fundamentals of Emergency Management	Emergency Planning	Exercise Design	ICS 100	ICS 200	ICS 300	ICS 400	Facilitator’s Course	Basic Public Information Officer’s Course	Risk Management Assessment
All (n=112)	2.93	3.29	2.88	2.28	2.31	2.53	2.62	2.25	2.64	2.68
Local EM (n=26)	2.85	3.69	3.27	2.46	2.46	2.77	2.77	3.08	3.35	3.58
State Agencies (n=23)	2.57	3.30	2.74	2.43	2.57	2.61	2.96	2.09	2.35	2.70
EMS (n=10)	2.80	3.10	2.50	1.80	2.00	2.30	2.20	2.10	2.10	2.00
Fire (n=16)	3.25	3.00	2.75	2.81	2.81	2.81	2.69	2.25	2.56	2.44
Law (n=13)	2.54	2.92	2.77	2.00	1.85	2.23	2.23	2.08	2.77	2.15
Medical Facility (n=13)	3.62	3.69	2.92	1.62	1.85	1.77	2.00	1.62	1.69	2.23
Public Health (n=3)	3.33	2.00	3.33	2.67	2.00	3.33	3.00	2.33	4.67	2.33
Other (n=8)	3.13	3.13	2.63	2.13	2.13	2.63	3.00	1.50	2.63	2.75

Table 9

<i>Courses 2</i>										
Discipline	Debris Management	Effective Communications	Emergency Planning for Access and Functional Needs Populations	Evacuation and Re-entry Planning	Hazardous Materials Contingency Planning	Hazardous Weather and Flood Planning	Intro to Emergency Services	Joint Information Center Planning	Mass Care Management	Mass Fatalities Incident Planning
All (n=112)	2.21	3.25	2.74	3.13	2.88	3.61	2.38	2.53	2.73	2.71
Local EM (n=26)	2.69	3.65	3.69	4.00	3.85	4.31	2.19	3.50	3.77	3.46
State Agencies (n=23)	2.78	2.78	2.96	3.26	2.78	3.61	2.39	2.48	2.48	2.52
EMS (n=10)	1.50	3.10	2.40	2.20	1.70	3.00	3.40	1.90	2.70	3.00
Fire (n=16)	2.00	3.44	2.50	2.56	2.88	3.25	2.19	2.06	2.25	2.44
Law (n=13)	1.38	2.85	2.15	3.00	2.46	3.31	2.00	2.54	2.15	2.46
Medical Facility (n=13)	1.85	2.77	2.31	3.08	2.77	3.69	2.77	1.69	2.46	2.00
Public Health (n=3)	2.33	4.67	2.67	4.00	3.33	4.67	3.00	2.67	4.33	4.00
Other (n=8)	2.13	4.00	1.63	2.13	2.25	2.75	1.75	2.50	1.88	2.00

Table 10

<i>Courses 3</i>								
Discipline	Mitigation for Emergency Managers	Planning for Children in Disaster	Public Information Officer Awareness	Radiation/ Nuclear Events	Recovery from Disaster Local Government Role	Respiratory Protection Programs	Structural Collapse Events	Web EOC Training
All (n=112)	2.51	2.70	2.51	2.06	2.71	2.38	2.55	2.74
Local EM (n=26)	3.35	3.42	2.88	2.35	3.50	2.46	2.58	2.88
State Agencies (n=23)	2.70	2.83	2.43	2.65	2.57	2.57	2.78	2.87
EMS (n=10)	1.90	2.40	2.00	1.50	1.80	2.20	2.00	3.10
Fire (n=16)	2.00	2.50	2.19	2.00	2.69	2.50	3.94	2.56
Law (n=13)	1.77	2.31	2.69	1.62	2.08	1.77	1.85	2.08
Medical Facility (n=13)	2.31	2.00	2.00	1.69	2.15	2.31	1.85	2.38
Public Health (n=3)	3.33	4.00	4.00	2.67	4.00	4.67	3.00	3.67
Other (n=8)	2.25	2.00	2.75	1.38	3.13	1.88	1.88	3.13

Considering the results of this section of the survey for all participants, only four courses obtained a mean score of greater than 3. Those courses were Emergency Planning, Effective Communications, Evacuation and Re-entry Planning, and Hazardous Weather and Flood Planning. All other courses included in the survey ranked less than a mean of 3. More variance is evident when considering the results by discipline.

Emergency Managers (n=26) ranked ten courses with a mean of 3.5 or higher or with median and mode of 4 or higher. Those courses are listed below with respective mean, median, and mode.

<u>Course/Topic</u>	<u>Mean</u>	<u>Median</u>	<u>Mode</u>
Hazardous Weather and Flood Planning	4.31	5	5
Evacuation and Re-entry Planning	4.00	4.5	5
Hazardous Materials Contingency Planning	3.85	4	5
Emergency Planning for Access and Functional Needs	3.69	4	5
Emergency Planning	3.69	4	5
Effective Communications	3.65	4	5
Risk Management Assessment	3.58	4	5
Joint Information Center Planning	3.50	4	4
Recovery from Disaster-Local Government Role	3.50	3.5	5
Exercise Design	3.27	4	4

State agency employees (n=23) had only one course receive a mean score of greater than 3.5 and one course with a mode of 5. Those courses are listed below.

<u>Course/Topic</u>	<u>Mean</u>	<u>Median</u>	<u>Mode</u>
Hazardous Weather and Flood Planning	3.61	4	5
Emergency Planning	3.30	3	5

Emergency medical services responders (n=10) highest ranked courses did not exceed a mean score of 3.5 however, the highest ranked courses are identified as the following:

<u>Course/Topic</u>	<u>Mean</u>	<u>Median</u>	<u>Mode</u>
Intro to Emergency Services	3.40	4	4
Effective Communications	3.10	4	4
Emergency Planning	3.10	3	3

The two highest areas of interest for *fire services* (n=16), even though scores may not meet or exceed a mean of 3.5 or median/mode of 4 are listed here.

<u>Course/Topic</u>	<u>Mean</u>	<u>Median</u>	<u>Mode</u>
Effective Communications	3.44	3.5	3
Hazardous Materials Contingency Planning	2.88	3	4

Law enforcement survey participants (n=13) highest ranked courses are as follows:

<u>Course/Topic</u>	<u>Mean</u>	<u>Median</u>	<u>Mode</u>
Hazardous Weather and Flood Planning	3.31	4	4
Evacuation and Re-entry Planning	3.00	3	3

Medical facility participants (n=13) which includes hospital and long term care personnel returned scores favoring courses as listed below.

<u>Course/Topic</u>	<u>Mean</u>	<u>Median</u>	<u>Mode</u>
Emergency Planning	3.69	4	4
Hazardous Weather and Flood Planning	3.69	4	4

Public health (n=3) indicated favor for the following, although the small sample size must be kept in mind in analysis of this data.

<u>Course/Topic</u>	<u>Mean</u>	<u>Median</u>	<u>Mode</u>
Effective Communications	4.67	5	5
Hazardous Weather and Flood Planning	4.67	5	5
Respiratory Protection Programs	4.67	5	5

Respondents in the “other” category (n=8) indicated interest in the courses listed here.

<u>Course/Topic</u>	<u>Mean</u>	<u>Median</u>	<u>Mode</u>
Effective Communications	4.00	4	4
Web EOC Training	3.13	4	4

A wide variety of other topics were mentioned in response to the open ended question regarding additional training needs and were often discipline specific operational training. While some of the topics suggested have cross discipline applicability, many of them would be well suited to discipline specific

conferences and local agency training events. A sample of additional topics mentioned by survey participants are randomly listed below.

Community Resiliency

Responder Safety and Health

Active Shooter Response

Critical Incident Stress Debriefing

Citizen Emergency Response Team Training

Multi-jurisdictional Response to Hazardous Materials Incidents

Multi-vehicle Accident Response

Response to Suicide Bombing Attacks

Wild land Fire Fighting

Structural Fire Fighting for Volunteers

SWAT Team Training

Operational WMD Response

Mass Casualty Incidents with fatalities

Public Assistance Program

Exercises

Exercises are focused practice activities that utilize a simulated scenario to enhance preparedness by testing emergency response plans and operational policies. Exercising is also a very effective training tool. Exercises are often required by the grants that support state and local emergency management programs.

Survey participants were asked how interested they are in working cooperatively with other jurisdictions or agencies in designing and completing exercises. The response mean was 3.76, the median was 4, and the mode was 5. This is indicative of a strong positive reaction to working cooperatively with others in the exercise arena.

This agency will use this information to encourage counties and response agencies to consider sharing exercise responsibilities, costs, and learning opportunities; as well as strive to set an example by creating multi-jurisdictional, multi-agency exercises within the state training and exercise program.

Conclusions

In spite of the small sample size, the information obtained through this survey provides some insight into the general training needs of emergency responders in North Dakota and will be taken into consideration in the planning of the training and exercise activities to occur over the next 18-24 months. In addition, information obtained through review of after action reports, course evaluations, certification

requirements, grant requirements, and verbal communications with responders will impact training program plans. As always, plans are fluid and must be responsive to changing needs.

Additional data details are available upon request. Contact Brenda Vossler, Training and Exercise Officer, North Dakota Department of Emergency Services.