



# Box Card Design

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## **Section 1: Overview**

Development of Box Cards is the key to the success of any MABAS division. The Box Card represents the basis for all response and can be the primary tool used to train and orient individuals to the MABAS concept.

## **Section 2: The Planning Process**

### Unit Typing

Unit typing will play an important role in box card development. Common terminology must be agreed upon as the inventories are compiled. For example, in some communities an ambulance is called a rescue squad, a truck is called a ladder and so on. Common vehicle typing must be used and it is recommended that communities use the NIMS typing system to ensure continuity. NIMS 2007 compliance will require communities to recognize the unit typing designated by NIMS. For more information on resource typing, check out NIMS Online at: [http://www.nimsonline.com/resource\\_typing/](http://www.nimsonline.com/resource_typing/) Additional information on resource designation can be found in the General Operating Procedures document adopted by MABAS-Wisconsin and in the definitions section of the document.

As with rescue squads, “Quints” are a common source of debate when designing run cards. It is recommended that if a quint has the necessary equipment required for engine work (per NFPA 1901), the unit should be considered an engine. Likewise, if the quint has primarily truck equipment (per NFPA 1901) it should be considered a truck.

### Inventory Internal Resources

Before a division can begin the process of developing Box Cards, an inventory of internal resources must be done by each community. It is important to take into account staffing as well as the equipment itself. For example, a community may have a truck and several engines, however the daily staffing of that community may not allow for both units to be sent on an incident. The division must take the time to have each department involved develop an inventory of equipment and the maximum number of units that community can send to a specific incident at stressed or thin times. A general rule of 80-20 should be considered – this rule allows for only 20% of a community's resources may be offered as mutual aid resources leaving 80% at home to protect their community. A resource inventory forms are available at the end of this section to assist in typing and categorizing local resources. A copy of the MABAS Resource Inventory form must be sent to the MABAS-Wisconsin Secretary-Treasurer.

### Share Resource Inventory Lists With Division Members

Once each community has developed their resource inventory list, these lists must be made available to each member of the division. This allows communities to identify resources that are otherwise unknown to division members. It also indicates capabilities of the communities. The goal is to build realistic box cards based on true division member capabilities.

### Determine Incident Needs

Box alarm cards must be developed based on community risk assessments. For example, a community with very close buildings and multiple exposures will have to address box cards differently than a community with large setbacks. Also take into consideration target hazards and any other special needs. Many communities already have this information available in pre-fire plans, contingency plans, and regional planning documents.

### Determine Response Times and Distance

When setting up box cards give consideration to response times and routes of responding units. The idea is to draw a some from multiple communities instead of a great amount from a few. Response times must be considered to ensure there is not a major gap in available units.

### Agree Upon A Format

It is recommended that the division agree upon one format or program for the cards to be developed in. Some divisions use "Word" as the primary program for developing cards. Word provides an easy table work sheet and is probably the most common program for people to use. However, "Excel" has advantages in that the entire division can be saved in one file with each page of the book representing a different card number for each community. As of January 1, 2008, all box cards will be in the Excel format for ease of entry into E-sponder.

The division members must agree upon a common numbering system. A standard card numbering system can provide a wealth of information to outside agencies. Several Wisconsin divisions developed the numbering system found in section six. The uniform numbering system provides three basic pieces of information: the municipality identifier, the box area, and the type of incident. A sample numbering system is provided in this document.

Many divisions have made the actual writing/filling out of the box cards into a collaborative event. The event sometimes coincides with a county-wide association or social meeting. These have been referred to by some divisions as a "Box Card Party."

## MABAS Resource Inventory

When complete, please fax or email to the MABAS-Wisconsin Secretary-Treasurer.

1. MABAS Division \_\_\_\_\_ Completed by: \_\_\_\_\_ (print)  
Contact Phone No. \_\_\_\_\_

1A E-mail address for your division \_\_\_\_\_

1B I've reviewed the existing resource matrix and find all information correct as of October 2001. \_\_\_\_\_ (Also answer questions 12 and 13.  
(signature/date)

2. Number of fire departments/districts in your division? \_\_\_\_\_

3. Number of fire stations in your division? \_\_\_\_\_

4. Number of paid departments: \_\_\_\_\_ Combination: \_\_\_\_\_ On-Call: \_\_\_\_\_  
(should total the same as question #2)

5. Number of paid firefighters and officers\* \_\_\_\_\_

Number of on-call firefighters and officers\* \_\_\_\_\_

Total of above \_\_\_\_\_

\*(consider contract employees as paid staff; number of paramedics need not be broken out)

6. Number of engines: Staffed \_\_\_\_\_  
Reserve \_\_\_\_\_  
Total \_\_\_\_\_

7. Number of truck/aerial units: Staffed \_\_\_\_\_  
Reserve \_\_\_\_\_  
Total \_\_\_\_\_

8. Number of ambulances: Staffed \_\_\_\_\_  
Reserve \_\_\_\_\_  
Total \_\_\_\_\_

9. Number of heavy squads: Staffed \_\_\_\_\_  
Reserve \_\_\_\_\_  
Total \_\_\_\_\_

10. Number of light squads/utility:      Staffed \_\_\_\_\_  
   Reserve \_\_\_\_\_  
   Total      \_\_\_\_\_

11. Number of tankers:                              Staffed \_\_\_\_\_  
   Reserve \_\_\_\_\_  
   Total      \_\_\_\_\_

12. Number of Brush Trucks                      Staffed \_\_\_\_\_  
   Reserve \_\_\_\_\_  
   Total      \_\_\_\_\_

13. Can your division support a request for a task force (2 engines, 1 truck, 1 heavy squad, 2 ambulances, & 1 chief)?       YES       NO

14. Number of support vehicles: \_\_\_\_\_

15. Miscellaneous units/vehicles worthy of remarks: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

16. General remarks/comments:  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

/MABAS Exec/MABAS Resource Inventory

## Section 3: MABAS Box Alarm Card Definitions

(In order of appearance on cards)

Cell Title	Definition
Department Name	The name of the Fire Department issuing the card.
Box Alarm Type	The type of emergency situation covered by the card.
Effective Date	The date the use of the card is authorized to begin by the issuing department.
MABAS Division	The Division in which the Fire Department holds a membership.
Box Alarm Number	The number for the card designated by the Fire Department. The numbering system should be coordinated with the other members of the Division.
Location or Area	This can be a single location or building; a geographical portion of the departments area of response or the entire area of response.
Authorized Signature	The signature of the Fire Chief of the department issuing the card.
Local Dispatch Area	This portion of the card is intended to show the response for any units prior to the Box Alarm level. The primary responding units will be those of the local department and possibly outside departments generally using auto-aid agreements.
Alarm Level	This refers to the designation given by the issuing department for responses to this location prior to the Box Alarm level. This allows for the two levels prior to the Box Alarm level. The name of the alarm levels will be based on local preference. Includes the names of the departments that are committed to provide this type of equipment at the alarm level designated.
Engines	Based on local designations, NIMS typing and NFPA 1901 Standards.
Tenders	Based on local designations, NIMS typing and NFPA 1901 Standards.
Trucks	Based on local designations, NIMS typing and NFPA 1901 Standards.
Squads	Based on local designations, NIMS typing and NFPA 1901 Standards.
Chiefs	Can include Chief, Deputy Chief, Assistant Chief, Battalion Chief or those staff officers acceptable to the members of the Division. <i>It is highly recommended that multiple chief officers be included at these levels to facilitate the IC roles</i>

Special Equipment	Any ancillary units, individuals or specialized apparatus that would be beneficial for the type of alarm designated by the card. These resources may or may not be owned and operated by the member departments.
MABAS Box Alarm	This portion of the card is intended to show the response for any units starting at the Box Alarm level. These responses are covered by the MABAS mutual aid agreements.
Alarm Level	This refers to the Box Alarm, 2 <sup>nd</sup> Alarm, 3 <sup>rd</sup> Alarm, etc. to the ultimate level deemed appropriate by the department to handle the possible emergency situations. Includes the names of the departments that are committed to provide this type of equipment at the alarm level designated.
Change of Quarters	This lists the station/s that will house units from neighboring departments. The specific units that are specified on each level will respond to other emergency calls for the duration of the original call unless they are asked to move up to the scene.
Special Instructions	This area is reserved for any information that will allow the MABAS telecommunicators handling the radio communications for the incident to have quick access to specific information to assist responding units. Some of these could be the address of the change of quarter's stations, special contact numbers for key department members, and numbers for departments that are due to respond that may have special contact requirements.
Interdivisional Request	An Interdivisional Request is activated when all companies have been dispatched on the specific Box Alarm Card have been dispatched and additional companies are required for a large scale incident. <b>During an Interdivisional Request, speed of response is important.</b> The Division providing companies determines which departments and units respond based upon pre-determined Interdivisional Strike Team or Task Force response cards.
Strike Team	A set number of resources of the same kind and type that have an established minimum number of personnel. In the MABAS General Operating Procedures, a Strike Team is a set number (usually five) of the same resource. All resource elements within a Strike Team must have common communications and a designated leader.
Task Force	Any combination of resources assembled to support a specific mission or operational need. All resource elements within a Task Force must have common communications and a designated leader. In the MABAS "Coloring Book", a Task Force is a resource package consisting of three engines, one truck, one heavy squad (this may be replaced with an extrication engine), three ambulances, and one chief.



## Section 4: Mutual Aid Box Alarm System Communications Committee

### RECOMMENDED PRACTICE #3 **MABAS Box Card Design**

#### **1.0 Purpose**

- 1.1 To help coordinate the design of MABAS Box Alarm Cards for new and existing MABAS Divisions using one standardized template containing all of the required information needed to dispatch a MABAS Box Alarm and for the MABAS Box Alarm to be easily understood by emergency personnel and telecommunicators.

#### **2.0 Scope**

- 2.1 This recommended practice applies to all new and existing MABAS Divisions wishing to have one template for use throughout their division that incorporates the traditional style card with recommended changes designed to make dispatching MABAS Box Alarms easier for telecommunicators and emergency service personnel.

#### **3.0 Background**

- 3.1 MABAS is currently experiencing rapid growth throughout numerous locations, with many new divisions being formed. Many of these new divisions have limited internal experience to draw upon in developing box alarm cards and have requested assistance with the design process as well as a generic box alarm card in an electronic format. The MABAS Communications Committee was tasked with this responsibility at the MABAS Executive Board meeting in February 2004. The MABAS Communications Committee has developed a standard template that contains all of the required elements needed to be able to design a MABAS Card and to be able to dispatch MABAS resources easily by a primary or secondary dispatch center.
- 3.2 Several changes to the “**traditional style**” card have been recommended to make it easier for telecommunicators and emergency service personnel to understand and reduce the number of errors during alarm dispatch. Those changes include:

- 3.2.1 The four-letter abbreviations for each department should be discontinued and full names are to be used. 8-point Arial Font should be the minimum size font used.
- 3.2.2 The “**Change of Quarters**” section on the older style cards has been a source of many errors and omissions. The new style card incorporates the “**Change of Quarters**” into the top portion of the alarm response area.
  - 3.2.2.1 Some departments may bring “**Change of Quarters**” companies into their stations and leave them there to handle further calls in their jurisdiction, throughout all the alarms. Others departments may bring “**Change of Quarters**” companies into the stations and move them to the scene on the next level of alarm. These are both allowable alternatives.
  - 3.2.2.2 “**Change of Quarters**” companies will be placed in the column for “**Change of Quarters**” and the station where they are expected to go will be placed in parenthesis. The address and directions to get to that station should be placed in the “**Information**” section.
- 3.2.3 The new style card does not limit the number of alarms that each department can have on their card. Each division can add as many alarms, per card as desired, by adding additional rows to the card.
- 3.2.4 It is recommended that the last level of alarm be reserved for “**Interdivisional Request**” and that level should include the “**1<sup>st</sup> CHOICE, 2<sup>nd</sup> CHOICE and 3<sup>rd</sup> CHOICE**” of which divisions to call when extra equipment is needed. (This request does not refer to, or should be confused with, the State of Illinois’ Mutual Aid response Flow Plan.)
- 3.2.5 The bottom of the card should be kept for addresses for the change of quarter’s stations and other pertinent information or instructions.
- 3.2.6 The card is designed to be placed in a clear plastic sheet protector with reinforced holes and to be placed in a 3-ring binder and/or on computer. Do not punch holes in the box alarm card, as that will make is harder to read and duplicate.

## 4.0 Guideline

- 4.1 Each box alarm card should include the following: The top section of the card is to include: **“Department Name, Box Alarm Type, Effective Date, MABAS Division #, Box Alarm #, Location or Area of Alarm, and Authorized Signature.”** There will be no other changes to this area.
  - 4.1.1 The next section is the **“Local Dispatch Area”** and will be the responsibility of the local dispatch authority. This is not a **MABAS** area and may include: **“Still, Full Still, Working Still, Automatic Aid, General Alarm, Etc.”** This area may be any number of rows that you choose for your division or department.
  - 4.1.2 **“Change of Quarters”** has been added to the “Local Dispatch Area” areas, and may be filled in, left blank, or deleted.
  - 4.1.3 The Box Alarm Card is designed around a progressive structure. **It is imperative that all still alarm companies be dispatched by the local dispatch authority prior to or simultaneously with the MABAS Box Alarm request.** It is not the responsibility of the MABAS Dispatcher to dispatch companies listed on a Box Alarm Card before the Box Alarm level.
  - 4.1.4 The next section is the **“MABAS BOX ALARM”**. This is where MABAS dispatching starts. Column headings may include: **“Alarm Level, Engines, Tenders, Trucks, Squads, EMS, Chiefs, Special Equipment, Change of Quarters”**, or others for specialized cards and as standardized throughout a Division.
    - 4.1.4.1 Department names are to be spelled out and are to be in at least 8-point, Arial font.
    - 4.1.4.2 Card is to be read left to right. Departments are to be sent to the scene unless in the **“Change of Quarters”** area.
    - 4.1.4.3 In **“Change of Quarters”**, the department listed is to be sent to the fire station listed in parenthesis. The addresses should be given in the information portion of the box alarm card, or on back of the card.

- 4.1.4.4 In the “**Special Equipment or Other**” column, apparatus or equipment that does not fall into the primary categories can be listed.
- 4.2 The number of alarm levels is left to the individual fire department to determine. MABAS starts at the “**Box Alarm Level**”, proceeds to the “**2<sup>nd</sup> Alarm Level, 3<sup>rd</sup> Alarm Level, 4<sup>th</sup> Alarm Level, 5<sup>th</sup> Alarm Level**”, and may continue through any number of levels that are put on the cards.
- 4.2.1 The last level of alarm be reserved for “**Interdivisional Request**” and that level should include the “**1<sup>st</sup> CHOICE, 2<sup>nd</sup> CHOICE and 3<sup>rd</sup> CHOICE**” of which divisions to call when extra equipment is needed. (This request does not refer to, or should be confused with, the State of Illinois’ Mutual Aid response Flow Plan.)
- 4.3 The bottom of the card should be left for “**Special Instructions or Information**”. Included in the Special Instructions should be the addresses for the stations listed in the “**Change of Quarters**” and any other pertinent information.
- 4.4 To eliminate clutter and confusion on box alarm cards, the following information **should not** be included on the front of box alarm cards:
- 4.4.1 Telephone numbers for responding agencies. The MABAS System is designed to use radio alerting on the “**IFERN Frequency**” (Interagency Fire Emergency Radio Network) to notify departments due to respond. This includes departments within adjacent MABAS divisions.
- 4.4.2 Area for Response District Maps. If a department desires to include maps for the response jurisdiction, change of quarters stations locations, etc., this information may be included on the back of the box alarm card.
- 4.4.3 Shaded Areas or Color Copies. The use of shading or color, other than black, is discouraged for various features on box alarm cards may limit the readability of the document after photocopying.
- 4.5 New cards should be sent out to all of the departments on the cards for a minimum thirty-(30) day review/approval process. They shall

be stamped draft, not signed and the effective date left blank. If there is no response from a department within the 30 day period, it will be understood that the draft cards are acceptable. After the 30-day review/approval process, cards shall be formalized by the addition of the authorized signature (actual or electronic) and effective date on each card. They shall then be sent out to each department in the Division and all departments listed on the cards at least seven (7) days prior to the effective date. It is the responsibility of each department to notify and copy their dispatch center.

- 4.6 To facilitate timely and accurate requests for a MABAS Box Alarm by a stricken agency, each Department should maintain current copies of the Box Alarm Cards for their Department in all emergency response vehicles.
- 4.7 Division 107's numbering system is described in Appendix D. The following numbers should be reserved by MABAS for system wide use:
  - 4.7.1 BOX #888, METRA/PACE BUS/Transportation Emergencies
  - 4.7.2 BOX #999, Weapons of Mass Destruction
- 4.8 Examples of different types of Box Alarms, using the standard format, are included as guides to completing new cards for your divisions.

## Section 5: MABAS Box Card Numbering System

The purpose of having a Box Card Numbering System is to address uniformity in the numbering of the box cards among division members. Each division should agree to one uniform method and this method is only a recommendation.

In this numbering system, there are three specific parts to the box card number. The parts consist of an agency/department identifying number, the department fire box area or location, and the incident typing into specific categories. The component parts of the box numbering system are as follows:

Example: 19 – 4 3

- **Fire Department Identifier**

The box card number begins with a unique fire department identifying number (e.g. above 19). Many fire departments already have these numbers established and in use. The examples below are from Milwaukee County:

West Allis	1
Franklin	2
Greendale	4
Wauwatosa	5
Hales Corners	6
Milwaukee County	7
Greenfield	8
North Shore	9
Saint Francis	12
Cudahy	14
South Milwaukee	16
Oak Creek	18

- **Box Number**

Each fire department currently has fire districts or geographical boxes assigned to their mutual aid cards (e.g. above 4). It is recommended that departments maintain those same numbers in this numbering system.

The middle number (right of the dash) in the numbering system is based on the fire box area/location and is determined by each fire department. If the municipality/agency has a single fire box card, life safety card or target hazard card, etc., then place “1” in that middle position to hold that position. The local municipality/agency can also use the numbers in the middle to identify a specialty within the category.

- **Incident Categories**

The type of card will fall into one of 9 categories (e.g. above 3) and the final number of the card indicates the category:

- 1 = Structure Fire/hydranted
- 2 = Structure Fire/non-hydranted
- 3 = Life Safety or EMS
- 4 = Brush Fire
- 5 = Water/Ice related
- 6 = Hazmat
- 7 = Tech Rescue
- 8 = Target Hazard
- 9 = Disaster

The following are examples of typical box card numbers using this numbering system:

- Franklin Fire Department has two different fire box areas and their fire box number 1 has hydrants, therefore the card number would be 2-11. If that same fire box had no hydrants, then the box number would be 2-12.
- Cudahy Fire Department has two technical rescue box cards, one is for rope rescue and one is for confined space rescue. The technical rescue box card for ropes would be 14-17 and the technical rescue box card for confined space would be 14-27.
- Oak Creek Fire Department has target hazard locations identified, one of which is at the new power plant under construction. The box card number for that location would be 18-28.

## **Section 6: Interdivisional Response Cards**

When a single community or multiple communities within a division experience major events, such as a natural disaster or a terrorist event, the resources of that division may be overwhelmed. MABAS uses Interdivisional Requests, consisting of Strike Teams and Task Forces (see definitions), to assist divisions in requesting resources during those times. For example, if a community in a Division is struck by a tornado and that community requests and receives all of the resources listed on their box card and is still in need, the stricken community can ask for an Interdivisional Request from an unaffected division. Interdivisional requests are usually not from a neighboring division, since that division may already have resources at the incident.

When establishing the Interdivisional Requests, speed of deployment is a top consideration in establishing and responding to an Interdivisional Request. Divisions giving an Interdivisional Request deployment must establish a mustering point for resources to gather prior to the deployment to the stricken community or division.

Not all divisions will have the resources to provide an Interdivisional Request for a Strike Team or Task Force deployment, and therefore may have to seek assistance from a division having a greater response time. Incident commanders must consider the time and distance for these requests earlier in the incident.

Staffing for Interdivisional Requests are: 4 personnel for engines, trucks, and squads (extrication engines), 2 personnel for EMS units and tenders, one chief and preferably one communications/assistant person. Training level at present is entry level, however starting January 1, 2010, all personnel on an Interdivisional Request deployment must be at the Firefighter 1 level competency. The training level for Basic Life Support (BLS) ambulances is Emergency Medical Technician-Basic and for Advanced Life Support (ALS) ambulances is Emergency Medical Technician-Paramedic.



## **Appendix A – Box Card Templates and Examples**