



MICHIGAN TECH EMERGENCY BLUE LIGHT TELEPHONE SYSTEM



PUBLIC SAFETY & POLICE SERVICES

OVERVIEW

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Emergency telephone systems are an essential safety feature on college campuses nationwide. Each stand alone emergency phone station should be instantly recognizable as an emergency communication device to campus residents or visitors at any time of the day or night. Use of each device should be readily apparent to anybody approaching the phone, under any circumstances.

Such emergency telephone systems have proven to be an effective and efficient means of summoning help in emergency situations. The stress of dealing with an emergency can significantly hinder normal thinking and reasoning abilities. The presence of an easily recognizable and usable means of summoning help is crucial to swift dispatch of assistance which may be lifesaving.

The Blue Light emergency phone system currently in place at Michigan Tech has been of value, but the university's steady move toward becoming a world class university demands world class amenities, especially where safety and security are concerned.

The shortfalls of the current system are not readily apparent to the casual observer. However, more intense scrutiny reveals serious systemic failures in what is purported to be an efficient method of summoning aid in a life threatening, stressful situation.

Briefly summarized, the current system is plagued by the following problems:

- 95% of the phones are not simple to use or do not have easy to understand instructions.
- 90% of the phones are not ADA compliant and many are not easily accessible by able persons.
- 60% of the phones are not easily identified as emergency phones.
- 60% of the "Blue Lights" are not located immediately above the emergency phones.
- 45% of the phones may be easily disabled by vandalism.

Each and every emergency phone should offer identical service to those in need. Imagine an individual attempting to call for help in an emergency. She picks up the phone, only to discover that the cord has been cut. Or picture an individual with a physical handicap trying to reach for an emergency phone, only to discover that her wheelchair cannot get close enough to allow her access.

One anecdotal instance I will offer is this. The DPS&PS recently updated our website. We were preparing to shoot a video of a female student placing a call on a Blue Light phone, as a demonstration of how to use the system. The location was on the north side of the Van Pelt Library. Lynn Czarnecki, the web site developer, was the first person to arrive at that location on the day we were shooting the video. I arrived to find Lynn walking around the pillar on which the blue light was located trying to find the emergency phone.

The phone is actually located inside of the vestibule, more than 15 feet away from the blue light. Imagine a distraught individual looking for that phone. Needless to say, I was extremely dismayed. At that point, I realized that an analysis of and improvements to our emergency phone system were necessary.

Implementation of a state of the art, true "Blue Light" emergency phone system is an investment that will yield immediate and long term gains. Every year during orientation, a large number of parents who are concerned about the well being of their children ask about emergency phone systems. A "true"

emergency phone system is actually a valuable recruiting tool because it emphasizes Michigan Tech's commitment to the safety and security of our students, our customers.

Imagine the feeling that the parents of incoming students will experience as they walk through the Michigan Tech campus on a warm fall evening. Strategically located, easily identifiable, simple to use emergency blue light phones greet them. Mom and Dad realize that Michigan Tech truly cares about the safety and security of the child that they are leaving in Houghton, 500 or more miles away from home. Priceless!

Please review the following information carefully. The benefits in human terms will more than compensate for the cost of a new system.

***RATING OF
CURRENT
CONFIGURATION***

RATING SYSTEM

Existing phones were evaluated and rated based on the following criteria:

- Recognizability as emergency telephone
- Accessibility/ADA compliance
- Ease of use/instructions
- Durability/resistance to vandalism
- Proximity of the blue light to the telephone

The maximum rating for each telephone under this system is “5”. A new, state of the art telephone would rate “5”.

The following table breaks down the rating criteria for each phone in our current system.

Also included is a photographic inventory of our current emergency phones with comments.

A summary of the data is as follows:

- New, state of the art phone scores a 5.
- Rating of average phone in current system is 2.39.
- Lowest rated phone in current system is 0.75.
- Highest rated phone in current system is 4.50.

***BLUE LIGHT EMERGENCY PHONE SYSTEM
RATING OF THE CURRENT CONFIGURATION***

<div> <div>EMERGENCY PHONE LOCATION</div> </div>		RATING CRITERIA	RECOGNIZABILITY AS EMERGENCY PHONE	ACCESSABILITY/ADA COMPLIANCE	EASE OF USE/INSTRUCTIONS	BLUE LIGHT PROXIMITY TO TELEPHONE	DURABILITY/RESISTANCE TO VANDALISM	RATING SCALE FROM 1 - 5
1	Upper Daniell Heights @ pole barn		1.00	1.00	0.50	1.00	1.00	4.50
2	Lower Daniell Heights @ Division St.		0.50	0.00	0.50	1.00	1.00	3.00
3	South side of Wads @ loading dock		1.00	0.00	0.50	0.75	1.00	3.25
4	West end of Wads		1.00	0.00	0.25	0.50	0.25	2.00
5	East end of McNair near lot 16		0.50	0.00	0.50	0.75	1.00	2.75
6	Lot 10		0.00	0.00	0.50	1.00	1.00	2.50
7	West entrance of Walker Arts		0.50	0.00	0.75	0.50	0.25	2.00
8	North side of Fisher Hall		1.00	0.00	0.50	0.75	1.00	3.25
9	West entrance of Rekhi Hall		0.50	0.00	0.25	0.50	0.25	1.50
10	East side of Library		0.50	0.00	0.25	0.50	0.25	1.50
11	North side of Library		0.00	0.00	0.00	0.50	0.25	0.75
12	West side of Library		0.50	0.00	0.25	0.50	0.25	1.50
13	North side of Administration Building		0.50	0.00	0.75	0.50	0.25	2.00
14	South side of Facilities Building		1.00	0.00	0.50	1.00	1.00	3.50
15	North side of M&M Building		1.00	0.00	0.50	1.00	1.00	3.50
16	North side of SDC Portage Clinic Drive		1.00	0.00	0.50	1.00	1.00	3.50
17	Southwest entrance of Forestry		1.00	1.00	1.00	0.50	0.25	3.75
18	Walkway from lot 26 to 7th Avenue		0.00	0.00	0.50	1.00	1.00	2.50
19	Walkway from lot 21 to 7th Avenue		0.00	0.00	0.50	1.00	1.00	2.50
20	Chem-Sci Bldg. - 5th floor hallway							0.00
21	Chem-Sci Bldg. - 6th floor hallway		0.00	0.00	0.25	0.00	0.25	0.50
AVERAGE RATING								
2.39								



E-PHONE #: 1

LOCATION: Upper Daniell Heights

OPERATES: Open box door, push button, connect direct to DPS&PS

CAPABILITIES: Connect to DPS&PS only

BLUE LIGHT LOCATION: Directly over phone

ACCESSABILITY: Snow is a hindrance in winter

SIGNAGE: On phone box door



E-PHONE #: 2

LOCATION: Division and Woodmar

OPERATES: Open box door, push button, connect direct to DPS&PS

CAPABILITIES: Connect to DPS&PS only

BLUE LIGHT LOCATION: Directly over phone

ACCESSABILITY: Snow is a hindrance in winter

SIGNAGE: On phone box door



E-PHONE #: 3

LOCATION: Wadsworth Hall Loading Dock

OPERATES: Open box door, push button, connect direct to DPS&PS

CAPABILITIES: Connect to DPS&PS only

BLUE LIGHT LOCATION: Not directly over phone

ACCESSABILITY: Good all seasons

SIGNAGE: On phone box door



E-PHONE #: 4

LOCATION: West Wadsworth Hall Vestibule

OPERATES: Lift handset, connect direct to DPS&PS

CAPABILITIES: Connect to DPS&PS only

BLUE LIGHT LOCATION: Not directly over phone

ACCESSABILITY: Good all seasons

SIGNAGE: "Campus Emergency Phone" sign located to right side of telephone



E-PHONE #: 5

LOCATION: East McNair entrance near lot 16

OPERATES: Push red button, connect direct to DPS&PS

CAPABILITIES: Red emergency button, black button allows on campus calls

BLUE LIGHT LOCATION: Directly over phone

ACCESSABILITY: Good all seasons

SIGNAGE: Direction for campus phone usage



E-PHONE #: 6

LOCATION: West end of lot 10, mounted on pole

OPERATES: Open box door, push button, connect direct to DPS&PS

CAPABILITIES: Connect to DPS&PS only

BLUE LIGHT LOCATION: Directly over phone

ACCESSABILITY: Very poor. Must climb snow bank in the winter.

SIGNAGE: On phone box door. No "EMERGENCY"



E-PHONE #: 7

LOCATION: Walker Arts, southwest vestibule

OPERATES: Lift handset, dial 1-2-3 to reach DPS&PS emergency line or dial 9-1-1.

CAPABILITIES: Campus calls, no special e-phone capability

BLUE LIGHT LOCATION: Outside of vestibule, not directly over telephone

ACCESSABILITY: Good all seasons

SIGNAGE: EMERGENCY Dial 123 sign near phone



E-PHONE #: 8

LOCATION: Fisher Hall, north entrance

OPERATES: Open box door, push button, connect direct to DPS&PS

CAPABILITIES: Connect to DPS&PS only

BLUE LIGHT LOCATION: Directly over phone

ACCESSABILITY: Poor. Box is mounted outside of a handrail.

SIGNAGE: On phone box door



E-PHONE #: 9

LOCATION: Rekhi Hall, inside of west vestibule

OPERATES: Lift handset, connect direct to DPS&PS

CAPABILITIES: Connect to DPS&PS only

BLUE LIGHT LOCATION: Outside of vestibule, not directly over telephone

ACCESSABILITY: Good all seasons

SIGNAGE: None. Yellow sticker on phone indicates that phone connects direct to DPS&PS



E-PHONE #: 10

LOCATION: Opie Library, inside of east vestibule

OPERATES: Lift handset, connect direct to DPS&PS

CAPABILITIES: Connect to DPS&PS only

BLUE LIGHT LOCATION: Outside of vestibule, not directly over telephone

ACCESSABILITY: Good all seasons

SIGNAGE: None.



E-PHONE #: 11

LOCATION: Van Pelt Library, inside north vestibule

OPERATES: Lift handset, dial 1-2-3 to reach DPS&PS emergency line or dial 9-1-1.

CAPABILITIES: Campus calls, no special e-phone capability

BLUE LIGHT LOCATION: Outside of vestibule, not directly over telephone

ACCESSABILITY: Good all seasons

SIGNAGE: None.



E-PHONE #: 12

LOCATION: Opie Library, inside of west vestibule

OPERATES: Lift handset, connect direct to DPS&PS

CAPABILITIES: Connect to DPS&PS only

BLUE LIGHT LOCATION: Outside of vestibule, not directly over telephone

ACCESSABILITY: Good all seasons

SIGNAGE: None. Yellow sticker on phone indicates that phone connects direct to DPS&PS



E-PHONE #: 13

LOCATION: Administration Bldg, north vestibule

OPERATES: Lift handset, dial 1-2-3 to reach DPS&PS emergency line or dial 9-1-1.

CAPABILITIES: Campus calls, no special capability

BLUE LIGHT LOCATION: Outside of vestibule, not directly over telephone

ACCESSABILITY: Good all season, but not handicap accessible.

SIGNAGE: EMERGENCY Dial 123 sign near phone



E-PHONE #: 14

LOCATION: Facilities Bldg, south side

OPERATES: Open box door, push button, connect direct to DPS&PS

CAPABILITIES: Connect to DPS&PS only

BLUE LIGHT LOCATION: Directly over phone

ACCESSABILITY: Good all seasons

SIGNAGE: On phone box door



E-PHONE #: 15

LOCATION: M&M Bldg, north side on waterfront

OPERATES: Open box door, push button, connect direct to DPS&PS

CAPABILITIES: Connect to DPS&PS only

BLUE LIGHT LOCATION: Directly over phone

ACCESSABILITY: Good all seasons

SIGNAGE: On phone box door



E-PHONE #: 16

LOCATION: SDC PH Clinic, north side by driveway

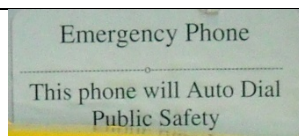
OPERATES: Open box door, push button, connect direct to DPS&PS

CAPABILITIES: Connect to DPS&PS only

BLUE LIGHT LOCATION: Directly over phone

ACCESSABILITY: Snow is a hindrance in winter

SIGNAGE: On phone box door



E-PHONE #: 17

LOCATION: Forestry, inside southwest vestibule

OPERATES: Lift handset, connect direct to DPS&PS

CAPABILITIES: Connect to DPS&PS only

BLUE LIGHT LOCATION: Outside of vestibule, not directly over telephone

ACCESSABILITY: Good all seasons

SIGNAGE: None. Small sticker above phone indicates that phone connects direct to DPS&PS



E-PHONE #: 18

LOCATION: Walkway, lot 26 to 7th Avenue

OPERATES: Open box door, push button, connect direct to DPS&PS

CAPABILITIES: Connect to DPS&PS only

BLUE LIGHT LOCATION: Directly over phone

ACCESSABILITY: Very poor. Must climb snow bank in the winter.

SIGNAGE: On phone box door. No "EMERGENCY"



E-PHONE #: 19

LOCATION: Walkway, lot 21 to 7th Avenue

OPERATES: Open box door, push button, connect direct to DPS&PS

CAPABILITIES: Connect to DPS&PS only

BLUE LIGHT LOCATION: Directly over phone

ACCESSABILITY: Very poor. Must climb snow bank in the winter.

SIGNAGE: On phone box door.



E-PHONE #: 20

LOCATION: Chem-Sci Bldg, 6th floor hallway

OPERATES: Lift handset, dial 1-2-3 to reach DPS&PS emergency line or dial 9-1-1.

CAPABILITIES: Campus calls, no special e-phone capability

BLUE LIGHT LOCATION: None. This is not an official "Blue Light" phone. It is a courtesy phone.

ACCESSABILITY: Good all seasons

SIGNAGE: None.

SUGGESTED UPGRADES

PROPOSED IMPROVEMENTS

The following information concerns proposed changes to the current blue light system. In fact, it amounts to a recommendation that the entire existing system be abandoned and replaced by a new state of the art system. The location of many phones would be changed in order to increase visibility and accessibility.

The new system would have the following benefits:

- Uniform appearance
- Uniform method of activating the emergency phone
- Easily used
- ADA compliant
- Adds emergency phones at these locations where none currently exist:
 - SDC swimming pool
 - SDC rifle range
 - Portage Lake Golf Course
 - Prince's Point Beach
 - Michigan Tech Trail System
- Ability to upgrade phones with wide area broadcast speakers.

All of the aforementioned locations have their own unique inherent dangers which necessitate the presence of an emergency phone.

Pricing for a phone in either a hard-wired version or a solar/cellular version is provided. This information will need further evaluation by TelCom personnel to select the appropriate unit for each location.

These prices are for the telephone units and mounting hardware only and do not include shipping or installation costs.

PROJECTED COST

Depending on the type of units selected, the cost of the hardware purchase for this proposal will be between approximately \$53,160 and \$98,745.

One means of helping to offset this expense would be for Michigan Tech Alumni classes to purchase an emergency phone unit as a gift to the university. The phone unit would then have an etched plate attached to it identifying the donor who made the gift.

BLUE LIGHT EMERGENCY TELEPHONES
SUGGESTED LOCATIONS, TELEPHONE STYLES AND PRICING OPTIONS

LOCATION NUMBER	LOCATION DESCRIPTION	TELEPHONE STYLE	UNIT COST (ALL SOLAR AND CELL)	UNIT COST (ALL HARD-WIRED)
1	South side Fac. Mgmt.	36" Call Station - wall mount	3,330	1,505
2	North side of Dow	36" Call Station - wall mount	3,330	1,505
3	Prince's Point beach	9' Tower	4,585	2,635
4	North side of DHH	9' Tower	4,585	2,635
5	Corner Hubbell/College	9' Tower	4,585	2,635
6	Core near Library/EERC	9' Tower	4,585	2,635
7	Core near Fisher/M&M	9' Tower	4,585	2,635
8	West side Walker	36" Call Station - wall mount	3,330	1,505
9	East side Rozsa	9' Tower	4,585	2,635
10	Lot 10	36" Call Station - pole mount	3,330	1,505
11	West end Wadsworth	36" Call Station - wall mount	3,330	1,505
12	South side Wadsworth	9' Tower	4,585	2,635
13	North side Wadsworth	9' Tower	4,585	2,635
14	North side McNair	9' Tower	4,585	2,635
15	East side McNair	9' Tower	4,585	2,635
16	Woodmar & Division	36" Call Station - pole mount	3,330	1,505
17	Lot 21 - Lower	9' Tower	4,585	2,635
18	Lot 26	9' Tower	4,585	2,635
19	South side Forestry	36" Call Station - wall mount	3,330	1,505
20	MacInnes @ P.H. Clinic	9' Tower	4,585	2,635
21	SDC Drive near Gates	9' Tower	4,585	2,635
22	Woodmar - Upper Hgts	36" Call Station - wall mount	3,330	1,505
23	SDC Swimming Pool	Yellow enclosure - wall mount	**610	610
24	Rifle/Pistol Range	Yellow enclosure - wall mount	**610	610
25	Golf Course	36" Call Station - wall mount	3,330	1,505
26	Michigan Tech Trails	9' Tower	4,585	1,505
			\$ 98,745.00	\$ 53,160.00

**Interior phone - hardwired not solar/cell