

Applicant Information and Form for 2022-2023 Matching Grant Requests

Optional: In your application package cover letter, you may request to be, or recommend a person to be, a reviewer of matching grant applications during this grant cycle. If selected, reviewers will only evaluate applications that are not associated with them.

Request for Grant Fund Distribution Page: this page is the last page herein and you must complete the top part of the form. State EMS will complete the bottom part, as indicated on the form. We need this to obtain state funds for awards.

A staff member of your organization who has cash transactions with the state for your organization must provide the address on the top part of this Distribution Page because the address on this page is not a normal mailing address. It must exactly be the same address as in the state financial system for your organization's corresponding nine-digit ID code and the additional three-digit sequence code of the address, for any funds to be provided.

Number of pages. Each application must be no more than 15 one sided pages, including the form and all content. Reviewers may not read any pages beyond 15 one sided pages. However, you may submit a one-page cover letter and letters of recommendation, and these do not count against the 15 pages.

Fastening. If you send a paper application, do not use a cover or folder, just staple in the upper left corner, with the first page of the application form the first of the stapled pages.



EMS MATCHING GRANT APPLICATION

**FLORIDA DEPARTMENT OF HEALTH
Emergency Medical Services Program**

Complete all items unless instructed differently within the application

Type of Grant Requested: **Rural** **Matching**

ID. Code (The State Bureau of EMS will assign the ID Code – (leave this blank) _____

1. Organization Name: Levy County Board of County Commissioners	
2. Grant Signer: (The applicant signatory who has authority to sign contracts, grants, and other legal documents. This individual must also sign this application)	
Name: Matt Brooks	
Position Title: Chairman of the Board of County Commissioners	
Address: 310 School Street	
City: Bronson	County: Levy
State: Florida	Zip Code: 32621
Telephone: 352-486-5219	Fax Number: 352-486-5167
E-Mail Address:	

3. Contact Person: (The individual with direct knowledge of the project on a day-to-day basis and responsibility for the implementation of the grant activities. This person may sign project reports and may request project changes. The signer and the contact person may be the same.)	
Name: James M. Harrell	
Position Title: Director, Department of Public Safety	
Address: PO Box 448	
City: Bronson	County: Levy
State: Florida	Zip Code: 32621
Telephone: 352-486-5209	Fax Number: 352-486-5401
E-Mail Address: mharrell@levydps.com	

4. Legal Status of Applicant Organization (Check only one response):

- (1) Private Not for Profit [Attach documentation-501 (3) ©]
- (2) Private for Profit
- (3) City/Municipality/Town/Village
- (4) County
- (5) State
- (6) Other (specify): _____

5. Federal Tax ID Number (Nine Digit Number). VF 59-6000717_ _ _ _ _

6. EMS License Number: 3802 Type: Transport Non-transport Both

7. Number of permitted vehicles by type: 0 BLS; 14 ALS Transport; 0 ALS non-transport.

8. Type of Service (check one): Rescue; Fire; Third Service (County or City Government, non-fire);
 Air ambulance; Fixed wing; Rotowing; Both; Other (specify) _____.

9. Medical Director of licensed EMS provider: If this project is approved, I agree by signing below that I will affirm my authority and responsibility for the use of all medical equipment and/or the provision of all continuing EMS education in this project. [No signature is needed if medical equipment and professional EMS education are not in this project.]

Signature: _____ Date: 24 Jan 2023

Print/Type: Name of Director Charles Hwang Jr.

FL Med. Lic. No. ME 126436

Note: All organizations that are not licensed EMS providers must obtain the signature of the medical director of the licensed EMS provider responsible for EMS services in their area of operation for projects that involve medical equipment and/or continuing EMS education.

If your activity is a research or evaluation project, omit Items 10, 11, 12, 13, and skip to Item Number 14. Otherwise, proceed to Item 10 and the following items.

10. Justification Summary: Provide on no more than three one sided, double spaced pages a summary addressing this project, covering each topic listed below.

- A) Problem description (Provide a narrative of the problem or need).
- B) Present situation (Describe how the situation is being handled now).
- C) The proposed solution (Present your proposed solution).
- D) Consequences if not funded (Explain what will happen if this project is not funded).
- E) The geographic area to be addressed (Provide a narrative description of the geographic area).
- F) The proposed time frames (Provide a list of the time frame(s) for completing this project).
- G) Data Sources (Provide a complete description of data source(s) you cite).
- H) Statement attesting that the proposal is not a duplication of a previous effort (State that this project doesn't duplicate what you've done on other grant projects under this grant program).

Next, only complete one of the following: Items 11, 12, 13 or 14. Read all four and then select and complete the one that pertains the most to the preceding Justification Summary. Note that on all, that credible before-after differences for emergency victim data are the highest scoring items on the Matching Grants Evaluation Worksheet used by reviewers to evaluate your application form.

11. Outcome For Projects That Provide or Effect Direct Services To Emergency Victims: This may include vehicles, medical and rescue equipment, communications, navigation, dispatch, and all other things that impact upon on-site treatment, rescue, and benefit of emergency victims at the emergency scene. Use no more than two additional one-sided, double-spaced pages for your response. Include the following.

- A) Quantify what the situation has been in the most recent 12 months for which you have data (include the dates). The strongest data will include numbers of deaths and injuries during this time.
- B) In the 12 months after this project's resources are on-line, estimate what the numbers you provided under the preceding "(A)" should become.
- C) Justify and explain how you derived the numbers in (A) and (B), above.
- D) What other outcome of this project do you expect? Be quantitative and explain the derivation of your figures.
- E) How does this integrate into your agency's five-year plan?

12. Outcome For Training Projects: This includes training of all types for the public, first responders, law enforcement personnel, EMS, and other healthcare staff. Use no more than two additional one-sided, double-spaced pages for your response. Include the following:

- A) How many people received the training this project proposes in the most recent 12-month time period for which you have data (include the dates).
- B) How many people do you estimate will successfully complete this training in the 12 months after training begins?
- C) If this training is designed to have an impact on injuries, deaths, or other emergency victim data, provide the impact data for the 12 months before the training and project what the data should be in the 12 months after the training.
- D) Explain the derivation of all figures.
- E) How does this integrate into your agency's five-year plan?

13. Outcome For Other Projects: This includes quality assurance, management, administrative, and other. Provide numeric data in your responses, if possible, that bear directly upon the project and emergency victim deaths, injuries, and/or other data. Use no more than two additional one-sided, double-spaced pages for your response. Include the following.

- A) What has the situation been in the most recent 12 months for which you have data (include the dates)?
- B) What will the situation be in the 12 months after the project services are on-line?
- C) If this project is designed to have an impact on injuries, deaths, or other emergency victim data, provide the impact data for the 12 months before the project and what the data should be in the 12 months after the project.
- D) Explain the derivation of all numbers.
- E) How does this integrate into your agency's five-year plan?

Skip Item 14 and go to Item 15, unless your project is research and evaluation and you have not completed the preceding Justification Summary and one outcome item.

14. Research and Evaluation Justification Summary, and Outcome: You may use no more than three additional one-sided, double spaced pages for this item.

- A) Justify the need for this project as it relates to EMS.
- B) Identify (1) location and (2) population to which this research pertains.
- C) Among population identified in 14(B) above, specify a past time frame, and provide the number of deaths, injuries, or other adverse conditions during this time that you estimate the practical application of this research will reduce (or positive effect that it will increase).
- D) (1) Provide the expected numeric change when the anticipated findings of this project are placed into practical use.
(2) Explain the basis for your estimates.
- E) State your hypothesis.
- F) Provide the method and design for this project.
- G) Attach any questionnaires or involved documents that will be used.
- H) If human or other living subjects are involved in this research, provide documentation that you will comply with all applicable federal and state laws regarding research subjects.
- I) Describe how you will collect and analyze the data.

ALL APPLICANTS MUST COMPLETE ITEM 15.

15. Statutory Considerations and Criteria: The following are based on s. 401.113(2)(b) and 401.117, F.S. Use no more than one additional double-spaced page to complete this item. Write N/A for those things in this section that do not pertain to this project. Respond to all others.

Justify that this project will:

- A) Serve the requirements of the population upon which it will impact.
- B) Enable emergency vehicles and their staff to conform to state standards established by law or rule of the department.
- C) Enable the vehicles of your organization to contain at least the minimum equipment and supplies as required by law, rule, or regulation of the department.
- D) Enable the vehicles of your organization to have, at a minimum, a direct communications linkup with the operating base and hospital designated as the primary receiving facility.
- E) Enable your organization to improve or expand the provision of:
 - 1) EMS services on a county, multi county, or area wide basis.
 - 2) Single EMS provider or coordinated methods of delivering services.
 - 3) Coordination of all EMS communication links, with police, fire, emergency vehicles, and other related services.

16. Work activities and time frames: Indicate the major activities for completing the project (use only the space provided). Be reasonable, most projects cannot be completed in less than six months and if it is a communications project, it will take about a year. Also, if you are purchasing certain makes of ambulances, it takes at least nine months for them to be delivered after the bid is let.

<i>Work Activity</i>	<i>Number of Months After Grant Starts</i>	
	<u>Begin</u>	<u>End</u>
Purchase Equipment	immediately	60 days
Refresher training for staff	60 days	90 days
Routine use on all frontline units	90 days	continuous

17. County Governments: If this application is being submitted by a county agency, describe in the space below why this request cannot be paid for out of funds awarded under the state EMS county grant program. Include in the explanation why any unspent county grant funds, which are now in your county accounts, cannot be allocated in whole or part for the costs herein.

We do not receive enough funds from the County Awards Grant to fund such a project. We are using this year's County Awards Grant for EMS training opportunities.

18. Budget:		
Salaries and Benefits: For each position title, provide the amount of salary per hour, FICA per hour, fringe benefits, and the total number of hours.	Costs	Justification: Provide a brief justification why each of the positions and the numbers of hours are necessary for this project.
TOTAL:	\$ 0.00	Right click on 0.00 then left click on "Update Field" to calculate Total

Expenses: These are travel costs and the usual, ordinary, and incidental expenditures by an agency, such as, commodities and supplies of a consumable nature, <u>excluding</u> expenditures classified as operating capital outlay (see next category).	Costs: List the price and source(s) of the price identified.	Justification: Justify why each of the expense items and quantities are necessary to this project.
TOTAL:	\$ 0.00	Right click on 0.00 then left click on "Update Field" to calculate Total

Vehicles, equipment, and other operating capital outlay means equipment, fixtures, and other tangible personal property of a non- consumable and non-expendable nature, and the normal expected life of which is 1 year or more.	Costs: List the price of the item and the source(s) used to identify the price.	Justification: State why each of the items and quantities listed is a necessary component of this project.
Ventilators, accessories, and service agreements	100000	Key component of project
TOTAL:	<u>\$100,000.00</u>	Right click on 0.00 then left click on "Update Field" to calculate Total

State Amount (Check applicable program) <input type="checkbox"/> Matching: 75 Percent <input checked="" type="checkbox"/> Rural: 90 Percent	<u>\$ 0.00</u> <u>\$90,000.00</u>	Right click on 0.00 then left click on "Update Field" to calculate Total Right click on 0.00 then left click on "Update Field" to calculate Total
Local Match Amount (Check applicable program) <input type="checkbox"/> Matching: 25 Percent <input checked="" type="checkbox"/> Rural: 10 Percent	<u>\$ 0.00</u> <u>\$10,000.00</u>	Right click on 0.00 then left click on "Update Field" to calculate Total Right click on 0.00 then left click on "Update Field" to calculate Total
Grand Total	<u>\$100,000.00</u>	Right click on 0.00 then left click on "Update Field" to calculate Total

19. Certification:

My signature below certifies the following.

I am aware that any omissions, falsifications, misstatements, or misrepresentations in this application may disqualify me for this grant and, if funded, may be grounds for termination at a later date. I understand that any information I give may be investigated as allowed by law. I certify that to the best of my knowledge and belief all of the statements contained herein and, on any attachments, are true, correct, complete, and made in good faith.

I agree that any and all information submitted in this application will become a public document pursuant to Section 119.07, F.S. when received by the Florida Bureau of EMS. This includes material which the applicant might consider to be confidential or a trade secret. Any claim of confidentiality is waived by the applicant upon submission of this application pursuant to Section 119.07, F.S., effective after opening by the Florida Bureau of EMS.

I accept that in the best interests of the State, the Florida Bureau of EMS reserves the right to reject or revise any and all grant proposals or waive any minor irregularity or technicality in proposals received, and can exercise that right.

I, the undersigned, understand and accept that the Notice of Matching Grant Awards will be advertised in the *Florida Administrative Weekly*, and that 21 days after this advertisement is published I waive any right to challenge or protest the awards pursuant to Chapter 120, F.S.

I certify that the cash match will be expended between the beginning and ending dates of the grant and will be used in strict accordance with the content of the application and approved budget for the activities identified. In addition, the budget shall not exceed, the department, approved funds for those activities identified in the notification letter. No funds count towards satisfying this grant if the funds were also used to satisfy a matching requirement of another state grant. All cash, salaries, fringe benefits, expenses, equipment, and other expenses as listed in this application shall be committed and used for the activities approved as a part of this grant.

Acceptance of Terms and Conditions: If awarded a grant, I certify that I will comply with all of the above and also accept any attached grant terms and conditions and acknowledge this by signing below.

Signature of Authorized Grant Signer
(Individual Identified in Item 2)

____/____/____
MM / DD / YY

THE TOP PART OF THE FOLLOWING PAGE MUST ALSO BE COMPLETED AND SIGNED.

**FLORIDA DEPARTMENT OF HEALTH
EMERGENCY MEDICAL SERVICES (EMS) GRANT UNIT**

REQUEST FOR GRANT FUND DISTRIBUTION

In accordance with the provisions of section 401.113(2) (a), *Florida Statutes*, the undersigned hereby requests an EMS grant fund distribution for the improvement and expansion of pre-hospital EMS.

DOH Remit Payment To:

A finance person in your organization who does business with the state should provide the address and corresponding 9 and 3 digit numbers of this part of the form, but it should be signed by the person identified in Item 2, 1st application page.

Name of Agency: Levy County Emergency Medical Services

Address in State: PO Box 448

Financial System Bronson, FL 32621

Federal 9-digit Identification number: 59-6000717 3-digit seq. code 063

Authorized Official: _____ 02/07/2023
Signature Date

Matt Brooks, Chairman of the Board of County Commissioners
Type or Print Name and Title

Sign and return this page with your application to:

*Florida Department of Health
Emergency Medical Services Unit, Grants
4052 Bald Cypress Way, Bin A-22
Tallahassee, Florida 32399-1722*

Do not write below this line. For use by State Emergency Medical Services Section

Grant Amount for State to Pay: \$ _____ Grant ID: Code: _____

Approved By: _____
Signature of State EMS Unit Supervisor Date

Approved By: _____
Signature of Contract Manager Date

State Fiscal Year: 2022 - 2023

<u>Organization Code</u>	<u>E.O.</u>	<u>OCA</u>	<u>Object Code</u>	<u>Category</u>
64-61-70-30-000	03	SF003	751000	059999

Federal Tax ID: VF _____ Seq. Code: _____

Grant Beginning Date: _____ Grant Ending Date: _____

10. Justification Summary

A) Problem Description

Mechanical ventilation equipment is often needed to provide continuous support for ventilation patients. Ventilators enhance the service's ability to accurately deliver the proper respirations to intubated patients during long transports. Ventilators for emergency services are also used while transporting inter-facility patients already on ventilators; transporting these patients without a portable ventilator is difficult and can be very traumatic for the patient. Without mechanized portable ventilators, these types of patients would require manual ventilation using equipment such as a bag-valve mask (BVM). This manual method of ventilation is not as accurate and the pace can be irregular.

Variables in pressure, tidal volume, rate, and oxygen concentration as a result of manual ventilation can present complications for patients in the pre-hospital setting. Mechanical ventilators however, allow for control of all of these components as well as continuous monitoring of carbon dioxide and oxygen levels. According to a 2015 Boundtree University article, "Mechanical ventilators provide more consistent minute volume than traditional positive pressure ventilation with a bag-valve device." The article also cited that lengthy manual ventilation with a bag-valve device is detrimental and often increases patient mortality. Delivering effective BVM ventilations can be difficult; while a proven intervention for respiratory failure, the ability to provide consistent, accurate tidal volume manually is limited. Pre-hospital emergency care often requires the delivery of ventilation to a patient over extended periods of time. The use of mechanized portable ventilators is a more accurate method of delivering ventilations in terms of both rate and volume.

Levy County EMS currently has four (4) ventilators for use on our seven (7) frontline transport units.

B) Present Situation

Currently, Levy County EMS has only four (4), dated ventilators for use with seven (7) frontline transport units. This means that paramedics on nearly half of our units must manage ventilator patients with manual ventilation devices such as AMBU bags. While the manual method is acceptable, portable ventilators are preferred for a more accurate delivery and less traumatic patient experience.

Transports in Levy County can be as far as 70 miles and last up to two (2) hours; this is an extensive amount of time crews could be required to provide manual ventilation. In 2022, Levy County EMS had 491 calls for response to a residential institution or healthcare facility; it is most typically these types of facilities that house patients who require

ventilation. Also in 2022, crews documented 258 intubations or use of a ventilator or BVM; it's those instances where a mechanical ventilator could only benefit the patient.

Apart from freeing the hands of a provider, the mechanical ventilator affords patients a higher and more specialized level of care. Whereas manual ventilations suffice for short periods, the mechanical ventilator offers uniform and finely adjusted breaths needed for prolonged care. As multiple respiratory etiologies exist, the ability to contour ventilations leads to better patient outcomes. The imprecision of manual ventilations is compounded over long transports and with certain populations (high number of COPD patients in Levy County). Metabolic derangements and barotrauma are much more likely to occur when performing extended manual ventilations without the adjustments and monitored alarms of a mechanical ventilator.

C) Proposed Solution

Levy County EMS is requesting grant funding for the purchase of enough portable ventilators for each remaining frontline unit that does not have one, as well as one (1) back up devices (four (4) total devices). The acquisition of these devices will solve delays in transports due to waiting for additional manpower to respond. Typically, when transporting a patient in need of ventilation assistance we have to request additional manpower to drive the ambulance or assist with patient care since someone has to be committed to providing manual ventilation. The addition of up-to-date ventilators on all of our frontline units will bring our service current with equipment capable of delivering ventilations at an exact rate and volume through the duration of our lengthy transports and will reduce transport times. Levy County has a high per capita intubation rate and routinely performs post-intubation care exceeding one hour. Automated ventilators should be considered a standard in all Levy County ambulances.

D) Consequences if not Funded

If grant funding is not allotted for this proposal, Levy County EMS will be forced to continue providing manual ventilation for ventilator patients transported by a unit that is not equipped with such a unit; potentially inadequate care. According to a study completed by Health Technology Inquiry Service, transport ventilators can provide more reliable ventilator support than bag-valve (manual) ventilation devices. The use of manual ventilation devices often requires additional manpower resulting in potential delayed emergency transport of the patient while requesting such resources; this delay could range from a few seconds to several minutes depending on nearby availability of personnel.

E) Geographic Area to be Addressed

Levy County EMS serves rural Levy County in its entirety; including 40,979 citizens in 1,118 square miles (2020 census data) on the Gulf Coast of North Central Florida. Levy County is a mostly agricultural community with a large elderly population. The Department operates seven (7) frontline ALS transport units 24/7/365 to provide for the citizens and visitors of Levy County. Additionally, we respond to mutual aid requests for the surrounding counties of Marion, Dixie, Gilchrist, Alachua, and Citrus. In 2022 Levy County EMS responded to 8,648 requests for EMS response resulting in 5,870 transports utilizing ALS transport units staffed with a minimum of one (1) Paramedic and one (1) EMT.

According to the U.S. Census, nearly 20% of our population is aged 65 or older. There are three (3) healthcare facilities located in Levy County; none of which are hospitals which means patients on the far western side of the County may face transport distances up to 70 miles away. Due to the lack of resources available in the County, transports can typically last up to two (2) hours. These statistics reveal the high potential for a Levy County EMS patient requiring ventilation.

F) Proposed Timeframe

If grant funding is awarded, the ventilators, accessories, warranties, and maintenance package will be purchased immediately. Upon receipt of the equipment, staff members will receive refresher training for safe and efficient use. It is estimated that training will take up to 30 days. Immediately thereafter, the equipment will be placed on all frontline units for use.

G) Data Sources

Data obtained for this project was retrieved from the U.S. Census Data for 2020, Health Technology Inquiry Service September 2010 Study: *Ventilation During Patient Transport*, Boundtree University; *How EMS Use of Ventilators has Evolved*, and Levy County EMS reporting software.

H) Statement

Levy County EMS was awarded enough funds to purchase two (2) ventilators back in 2016 under this grant program. Since that time, the vents have either been removed from service or are in need of replacement as they have met their end of life or they spend more time being repaired due to their antiquated status and technician availability. The vents we are requesting funding for will not be replacements as we are equipping units with vents that do not have vents on them.

11. Outcome for Projects that Provide or Effect Direct Services to Emergency Victims

A) In the past 12 months, Levy County EMS has provided transports requiring ventilation, most were transports from the local hospital that is not suitable to treat the patient's diagnosis to a more appropriate facility, up to 70 miles away. In 2022, Levy County EMS provided 1,007 treatments that could require ventilation. That's potentially 1,007 patients that were at the risk of crew fatigue, delayed transport times, and lack of adequate ventilation.

B) The estimated number of patients requiring ventilation is expected to increase due to aging residents in the area as well as an increase of residents due to growth in the area. In the 12 months following implementation of this project, 100% of all patients requiring ventilation would receive reliable, accurate ventilation from a mechanical device. This would reduce the chance of inadequate ventilation due to inconsistent rate and volume and crew fatigue during extended transport times. The overall result would be better pre-hospital patient care provided to all Levy County EMS patients in need of ventilation or breathing assistance.

C) Data referenced above was retrieved from Levy County EMS report documentation software. Estimates for the increase in the number of patients requiring ventilation were derived after analyzing Census statistics and a noted increase in residential building permit requests.

With all frontline units stocked with a mechanical ventilator crews would have access to this standard treatment/level of care to provide to all patients required ventilation.

D) The result of this project will be reliable, accurate ventilation to all ventilator patients. Additionally, the vents we are considering also offer an added feature; CPAP and Bi-PAP. In 2022, 47 patients received CPAP as a treatment in our ambulances. These features will allow for even better treatment for those patients who might not need ventilation, but still need assistance to breathe more regularly and effectively. Thus, providing an increase in the quality of services provided to the citizens and visitors of Levy County.

E) The Vision of Levy County EMS is to develop, manage, and operate a comprehensive emergency response organization to serve the citizens and visitors of Levy County. The Department will embrace new technologies and techniques, focusing on training and education to provide the highest level of customer service and satisfaction in a professional and caring manner. This project will enable Levy County EMS to meet our goals in providing quality care to the citizens and visitors of the County by prudent utilization of public funds for purchase of equipment that meets or exceeds industry standards of care.

15. Statutory Considerations and Criteria

A) This project will allow Levy County EMS to provide proper treatment to patients requiring ventilation. The proposed equipment will provide for better functionality than manual methods; this, combined with continuous training, will lead to better outcomes for ventilated patients.

B) N/A

C) N/A

D) N/A

E) 1) Levy County EMS will be improved by removing the potential for fatigue to play a part in the outcome of the patient due to ventilation management. This will also allow for better use of our resources as additional manpower would not typically be required with the use of a portable ventilator versus manual methods.

2) N/A

3) N/A