# MEMORANDUM

SHC
Agenda Item No. 3(A)

| | | | |
|---|---|---|---|
| **TO:** | Honorable Chairman Anthony Rodriguez and Members, Board of County Commissioners | **DATE:** | September 8, 2026 |
| **FROM:** | Geri Bonzon-Keenan County Attorney | **SUBJECT:** | Resolution retroactively approving and authorizing the County Mayor's application for, receipt, and expenditure of grant funds of up to $3,405,936.00 upon award from the United States Department of Transportation through its Safe Streets and Roads for All (SS4A) grant program, to Miami-Dade County, through the Miami-Dade Fire Rescue Department, for the implementation of the Whole Blood Initiative; authorizing the County Mayor to apply for, receive, and expend additional funds if such funding becomes available through this grant program, for the purposes described herein; and, subject to available funding, utilize up to $851,484.00 in Fire District funds to satisfy cash match funding requirements for the purposes described herein; authorizing the County to execute all necessary grant documents and amendments and to exercise the provisions contained therein |

The accompanying resolution was prepared by the Miami-Dade Fire and Rescue Department and placed on the agenda at the request of Prime Sponsor Commissioner Roberto J. Gonzalez.

for
Geri Bonzon-Keenan
County Attorney

GBK/ks

# Memorandum

MIAMI-DADE COUNTY

**Date:** October 6, 2026

**To:** Honorable Chairman Anthony Rodriguez
and Members, Board of County Commissioners

**From:** Daniella Levine Cava
Mayor

**Subject:** Resolution Retroactively Approving and Authorizing Miami-Dade County, through Miami-Dade Fire Rescue Department, to apply for, receive and expend up to $3,405,936 in grant funds from the United States Department of Transportation

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**Summary**

This item seeks retroactive approval and authorization to apply for, receive, and expend up to $3,405,936.00 in grant funding awarded by the United States Department of Transportation (USDOT) through its Safe Streets and Roads for All (SS4A) grant. Miami-Dade County, through the Miami-Dade Fire Rescue Department (MDFR), is requesting to implement a countywide Whole Blood Program to enhance prehospital care. The Whole Blood Initiative will strengthen prehospital trauma care, reduce preventable crash fatalities, and advance Vision Zero goals by closing the critical time-to-transfusion gap. A local match of at least 20% ($851,484.00) of the total project cost is required. The matching funds will come from available Fire District funds.


**Recommendation**

It is recommended that the Board of County Commissioners (Board) approve the attached resolution retroactively authorizing the County Mayor or County Mayor's designee to apply for, receive, and expend up to $3,405,936 in SS4A grant funds for the implementation of the Whole Blood Initiative. It is further recommended that the County Mayor or County Mayor's designee be authorized to apply for, receive, and expend additional funding if such funding becomes available through said grant program, and utilize up to $851,484 to satisfy any cash match funding requirements, subject to available funding. Additionally, it is recommended that the County Mayor or County Mayor's designee be authorized to execute agreements all necessary agreements, documents, and amendments, provided that any such amendments do not alter the purposes of the SS4A grant and are approved by the County Attorney's Office for form and legal sufficiency.

**Scope**

The equipment, supplies, and services provided through this grant funding will be used countywide.

**Delegation of Authority**

This item retroactively authorizes the County Mayor or County Mayor designee to apply for, receive, and expend up to $3,405,936 in grant funds from the SS4A grant, and, subject to available funding, utilize up to $851,484 to satisfy any cash match funding requirements. This item also authorizes the County Mayor or County Mayor's designee to apply for, receive, and expend additional funding should it become available. Furthermore, this item provides authority to the County Mayor or County Mayor's designee to execute all required documents and amendments and to exercise all provisions contained within the award, provided amendments are consistent with the purposes described and approved for legal sufficiency.

**Fiscal Impact/Funding Source**
The SS4A is funded and administered by USDOT. Awarded agencies must provide a local match of at least 20% ($851,484.00) of the total project cost. The County's match will come from available Fire District funds.

**Track Record/Monitor**
The grant award will be monitored by the MDFR Grants Management Bureau.

**Background**
The Whole Blood Initiative aims to reduce roadway fatalities by addressing hemorrhagic shock, the leading preventable cause of death after severe trauma, by closing the critical time-to-transfusion gap. The SS4A grant program supports planning, infrastructure, and behavioral and operational initiatives to prevent fatalities and serious injuries on roads and streets involving all roadway users, including pedestrians, bicyclists, public transportation, motorists, and commercial vehicle operators. Trauma studies consistently show that the greatest mortality benefit occurs when whole blood is administered within 20 minutes of injury, which is far earlier than patients typically reach a trauma center in Miami-Dade County. This initiative also directly advances MDC's Vision Zero goals to eliminate traffic-related deaths and strengthen post-crash care. It enhances trauma survivability under the Safe System Approach and will be one of the first countywide prehospital whole blood demonstration programs integrated into a Vision Zero framework and evaluated for its impact on roadway trauma outcomes.

MDFR responds to more than 280,000 calls annually across a diverse socioeconomic service area of 1,907 square miles. In 2025, 141 MDFR-treated patients with a median age of 40 met criteria for whole blood transfusion and would have been eligible if the program were in place. The proposed program will acquire, equip, and deploy (7) whole blood transport vehicles, (1) program coordinator vehicle, and (2) air rescue helicopters with low-titer O negative whole blood (LTOWB) or other compatible products. Funding will support necessary equipment, LTOWB storage systems, training, and a dedicated program coordinator and assistant.

Arnold Palmer
Chief of Public Safety

# MEMORANDUM

**(Revised)**

**TO**: Honorable Chairman Anthony Rodriguez
and Members, Board of County Commissioners

**DATE**: October 6, 2026

**FROM:** Geri Bonzon-Keenan
County Attorney

**SUBJECT**: Agenda Item No.

**Please note any items checked.**

_____ **"3-Day Rule" for committees applicable if raised**

_____ **6 weeks required between first reading and public hearing**

_____ **4 weeks notification to municipal officials required prior to public hearing**

_____ **Decreases revenues or increases expenditures without balancing budget**

_____ **Budget required**

_____ **Statement of fiscal impact required**

_____ **Statement of social equity required**

_____ **Ordinance creating a new board requires detailed County Mayor's report for public hearing**

_____ **No committee review**

_____ **Requires more than a majority vote (i.e., 2/3's present ____, 2/3 membership ____, 3/5's ____, unanimous ____, majority plus one ____, CDMP 7 votes (majority of membership) ____, CDMP 2/3 members present but not less than 7 votes (majority of membership) ____, CDMP 9 votes (2/3 membership) _____) to approve**

_____ **Current information regarding funding source, index code and available balance, and available capacity (if debt is contemplated) required**

Approved _____ Mayor Agenda Item No.
Veto _____
Override _____

RESOLUTION NO. _____

RESOLUTION RETROACTIVELY APPROVING AND AUTHORIZING THE COUNTY MAYOR OR COUNTY MAYOR DESIGNEE'S APPLICATION FOR, RECEIPT, AND EXPENDITURE OF GRANT FUNDS OF UP TO $3,405,936.00 UPON AWARD FROM THE UNITED STATES DEPARTMENT OF TRANSPORTATION THROUGH ITS SAFE STREETS AND ROADS FOR ALL (SS4A) GRANT PROGRAM, TO MIAMI-DADE COUNTY, THROUGH THE MIAMI-DADE FIRE RESCUE DEPARTMENT, FOR THE IMPLEMENTATION OF THE WHOLE BLOOD INITIATIVE; AUTHORIZING THE COUNTY MAYOR OR COUNTY MAYOR'S DESIGNEE TO APPLY FOR, RECEIVE, AND EXPEND ADDITIONAL FUNDS IF SUCH FUNDING BECOMES AVAILABLE THROUGH THIS GRANT PROGRAM, FOR THE PURPOSES DESCRIBED HEREIN; AND, SUBJECT TO AVAILABLE FUNDING, UTILIZE UP TO $851,484.00 IN FIRE DISTRICT FUNDS TO SATISFY CASH MATCH FUNDING REQUIREMENTS FOR THE PURPOSES DESCRIBED HEREIN; AUTHORIZING THE COUNTY MAYOR OR COUNTY MAYOR'S DESIGNEE TO EXECUTE ALL NECESSARY GRANT DOCUMENTS AND AMENDMENTS AND TO EXERCISE THE PROVISIONS CONTAINED THEREIN

**WHEREAS**, this Board desires to accomplish the purposes outlined in the accompanying County Mayor's memorandum, a copy of which is incorporated herein by reference,

**NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COUNTY COMMISSIONERS OF MIAMI-DADE COUNTY, FLORIDA,** that this Board:

**Section 1**. Incorporates and approves the foregoing recital, as if fully set forth herein.

**Section 2**. Retroactively approves and authorizes the County Mayor's or County Mayor's designee's application for, receipt, and expenditure of grant funds of up to $3,405,936.00 from the United States Department of Transportation through its Safe Streets and Roads for All

(SS4A) grant program upon award to Miami-Dade County, through the Miami-Dade Fire Rescue Department (MDFR), for the implementation of the Whole Blood Initiative. The application for said funds, including its supporting narrative and budget, is attached hereto and incorporated herein as Exhibit A.

**Section 3**. Authorizes the County Mayor or County Mayor's designee to apply for, receive, and expend additional funding if it becomes available through the SS4A grant program, for the purposes described herein, and subject to available funding, utilize up to $851,484.00 in Fire District funding to satisfy cash match funding requirements for the purposes described in section 2.

**Section 4.** Authorizes the County Mayor or County Mayor's designee to execute all necessary grant documents and amendments to effectuate the purposes described in sections 2 and 3 and exercise the provisions contained therein, provided that any amendments are for the purposes described herein and have been approved by the County Attorney's Office for form and legal sufficiency.

The foregoing resolution was offered by Commissioner , who moved its adoption. The motion was seconded by Commissioner and upon being put to a vote, the vote was as follows:

Anthony Rodriguez, Chairman
Kionne L. McGhee, Vice Chairman

| | |
|---|---|
| Marleine Bastien | Juan Carlos Bermudez |
| Sen. René García | Oliver G. Gilbert, III |
| Roberto J. Gonzalez | Keon Hardemon |
| Danielle Cohen Higgins | Vicki L. Lopez |
| Natalie Milian Orbis | Raquel A. Regalado |
| Micky Steinberg | |

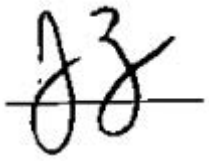
The Chairperson thereupon declared this resolution duly passed and adopted this 6th day of October, 2026. This resolution shall become effective upon the earlier of (1) 10 days after the date of its adoption unless vetoed by the County Mayor, and if vetoed, shall become effective only upon an override by this Board, or (2) approval by the County Mayor of this resolution and the filing of this approval with the Clerk of the Board.

MIAMI-DADE COUNTY, FLORIDA
BY ITS BOARD OF COUNTY
COMMISSIONERS

JUAN FERNANDEZ-BARQUIN, CLERK

By:_____
Deputy Clerk

Approved by County Attorney as
to form and legal sufficiency.



Javier Zapata

EXHIBIT A

# USDOT Safe Streets and Roads for All (SS4A) 2026 Planning and Demonstration Grants

## Valid Eval Feedback Report

**Miami-Dade County**
Conduct Demonstration or Other Supplemental Planning Activities (only)

⚠ Profile editing for this event has been disabled by its Organizer(s)

**Entity/Community Name**

Miami-Dade County

**ss4a_id_load**

SS4A_FY26_P_822

**Primary Telephone number**

7863314478

**Entity Community Type**

County Government

**Applicant State**

FL

**Applicant 5-digit Zip Code**

33178

**Applicant UEI**

GZHNMBAMR4P3

**Alternate Contact First Name**

Arnold

**Alternate Contact Last Name**

Palmer

**Alternate Telephone number**

3053753076

**Alternate Email**

Arnold.Palmer@miamidade.gov

**Total Jurisdiction Population**

2,700,000

**Total Count Motor Vehicle-Involved Roadway Fatalities (2019-2023)**

1,596

**Alternative Fatality Data Source (upload documentation in Uploads section if applicable)**

N/A

**Total Average Annual Fatality Rate (per 100,000 population)**

11.8

**Has your jurisdiction received an SS4A Grant award in a previous year (i.e., FY22, FY23, FY24, or FY25)?**

- [ ] Planning and Demonstration Grant
- [x] Implementation Grant
- [ ] No previous SS4A awards

**Project Title**

Miami-Dade County Whole Blood Initiative

**Project Goal**

This program aims to significantly reduce roadway fatalities by addressing hemorrhagic shock, the leading cause of preventable death

**Are underserved communities included in the jurisdiction(s) covered by this application?**

The area covered by this application is partially located in an underserved community

**If your application includes supplemental planning activities, select all that apply.**

- [x] Additional Analysis
- [x] Expanded Data Collection
- [ ] Complementary Planning
- [x] Road Safety Audits
- [ ] Not Applicable
- [ ] Other (please specify)

**Other (specify here)**

N/A

**If your application includes demonstration activities, select all that apply.**

- [ ] Quick-builds using temporary materials
- [ ] Demonstration/Pilot of Behavioral Program
- [x] Demonstration/Pilot of Operational Program
- [ ] Demonstration/Pilot of technology to support safety planning and analysis
- [ ] MUTCD Engineering Studies
- [ ] Not Applicable
- [ ] Other (please specify)

**Other (specify here)**

N/A

**Supplemental planning and demonstration activity results (if applicable)**

The Whole Blood Program is expected to reduce crash related fatalities by enabling earlier initiation of lifesaving transfusions. By deploying (7) whole blood equipped ground units, (1) program coordinator vehicle, and equipping (2) Air Rescue helicopters, MDFR can deliver transfusions at the scene or en route, substantially narrowing the care gap created by the County's 29 minute median dispatch to hospital time. Expected outcomes include a 20% mortality reduction, 15% faster hemodynamic stabilization, and improved 60 minute and 24 hour survival, with the greatest benefit in high risk and underserved areas. MDFR's Planning Division will oversee data collection and program evaluation in reference to response times. Miami-Dade County's Vision Zero team will incorporate program outcomes into future High Injury Network updates and Action Plans.

**Action Plan Status**

- (●) We have an Action Plan or established plan(s) that contain the required Action Plan elements in Table 1 of the NOFO and have attached a Self-Certification Eligibility Checklist
- ( ) We are in the process of completing an SS4A-funded Action Plan
- ( ) We are located in a jurisdiction that is in the process of completing an SS4A-funded Action Plan
- ( ) Not applicable. We are not requesting funds to "Conduct Demonstration and/or Supplemental Planning Activities (ONLY)"

**Plan Weblink**

https://www.miamidade.gov/global/initiatives/visionzero/home.page

**Action Plan Owner**

N/A

**Previous year funding**

- [ ] No
- [x] Yes, our jurisdiction received a previous award to develop or complete an Action Plan
- [ ] Yes, our jurisdiction is located in a region that received a previous Action Plan award

**If the answer is "Yes", please provide proof of coordination (e.g., letter, email) from the relevant entities affirming that they are aware of your application and the need for coordination among all recipients. Please upload the proof of coordination in the Document Uploads section below AND check the box below affirming that you will coordinate with the relevant entities.**

- [x] I affirm that relevant entities will be coordinated with

**Total SS4A Funding Request**

3,405,936

**Total SS4A Non-Federal Match**

851,484

**Total SS4A Project Cost**

4,257,420

**Total Other Federal Funds (if applicable)**

**Are you using Tribal Transportation Program (TTP) funds as non-Federal match? (Federally recognized Tribal governments only)**

No

**Does your funding request include indirect rate?**

- ( ) Yes. I have uploaded a letter from my cognizant federal agency below.
- ( ) Yes. I am using the 15% de minimus.
- (•) No.

**Application Type**

Conduct Demonstration or Other Supplemental Planning Activities (only)

Primary Contact

**Narissa Tooks**
narissa.tooks@miamidade.gov

Auto-generated ID field for internal program use:

SS4A_FY26_P_822

## Materials Submitted for Evaluation

**SF-424 Application for Federal Assistance (required) (PDF)** (pdf file)

miami_dade_county_of_sf_424.pdf

**SF-424A Budget Information for Non-Construction Programs (required) (PDF)** (pdf file)

miami_dade_county_of_sf_424a.pdf

**SF-424B Assurances for Non-Construction Programs (required) (PDF)** (pdf file)

SF424B-MDFR-SS4AGrantApplication.pdf

**SF-LLL Disclosure of Lobbying Activities (required) (PDF)** (pdf file)

SFLLL-MDFR-SS4AGrantApplication.pdf

**Narrative (required) (PDF)** (pdf file)

**Attachment A** MDCWholeBloodInitiative-MDFRSS4ANarrative.pdf

**Map (required) (PDF)** (pdf file)

RoadwayNetworkv2.pdf

**Spatial Data (Zip file)** (application/zip file)

MDC_Roadway.zip

**Spatial Data (KML file)** (application/vnd.google-earth.kml+xml file)

MDC_KMLFiles.zip

**Planning and Demonstration Grant Supplemental Budget (required) (xlsx)** (xls file)

**Attachment B** miami_dade_county_of_supplemental_budget.xlsx

**Alternative Fatality Data (optional) (PDF)** (pdf file)

**Self-Certification Eligibility Worksheet (optional) (PDF)** (pdf file)

SS4A-FY26-Self-Certification-Eligibility-Worksheet.pdf

**Action Plan (PDF)** (pdf file)

2024-vision-zero-action-plan.pdf

**Proof of Coordination (optional) (PDF)** (pdf file)

Re_SafeStreetsandRoadsForAllProgram-GrantCollaborationEmail.pdf

**Federal Cognizant Agency Letter (optional) (PDF)** (pdf file)

**Letters of Support (optional) (PDF)** (pdf file)

**Supporting Documents (optional) (PDF)** (pdf file)

miami_dade_county_of_supporting_documents.pdf

**Overview:** Miami-Dade County (MDC) respectfully requests $3.4 million in SS4A Demonstration Grant funding to implement the Miami-Dade County Whole Blood Initiative, a prehospital whole blood transfusion program to be executed by Miami-Dade Fire Rescue (MDFR). This program aims to reduce roadway fatalities by addressing hemorrhagic shock, the leading preventable cause of death after severe trauma, while directly advancing MDC's Vision Zero goals to eliminate traffic-related deaths and strengthen post-crash care (Callcut et al., 2019). It enhances trauma survivability under the Safe System Approach and will be one of the first countywide prehospital whole blood demonstration programs integrated into a Vision Zero framework and evaluated for its impact on roadway trauma outcomes.

MDFR responds to more than 280,000 calls annually across a diverse socioeconomic service area of 1,907 square miles. Median emergency timelines show that it takes 9 minutes from dispatch to first responder arrival, 20 minutes from on-scene arrival to hospital arrival, and 29 minutes total from dispatch to hospital arrival. As a result, half of all trauma patients that need blood experience roughly 29 minutes without access to blood products. Trauma studies consistently show that the greatest mortality benefit occurs when whole blood is administered within 20 minutes of injury, which is far earlier than patients typically reach a trauma center in MDC (Aashish et al., 2025). In 2025, 141 MDFR-treated patients with a median age of 40 met criteria for whole blood transfusion and would have been eligible if the program were in place. Between 2019 and 2024, the MDC Vision Zero Hub recorded 1,869 motor vehicle crash fatalities. National data show that 30% of trauma deaths within the first 30 minutes are due to uncontrolled hemorrhage, suggesting that approximately 570 local fatalities during this period might have been mitigated with earlier blood administration (Luchter, 1998; Kalkwarf, 2008).

The proposed program will acquire, equip, and deploy (7) whole blood transport vehicles, (1) program coordinator vehicle, and (2) air rescue helicopters with low-titer O negative whole blood (LTOWB) or other compatible products. Funding will support necessary equipment, LTOWB storage systems, trainings, and a dedicated program coordinator and assistant. This initiative will meaningfully reduce preventable post-crash fatalities, advance MDC's Vision Zero Action Plan, and reinforce the USDOT Safe System Approach by enhancing rapid, field-based hemorrhage control and transfusion capabilities throughout the entire county.

**Location:** MDC experiences over 60,000 motor vehicle crashes annually, resulting in more than 300 fatalities and 1,500 serious injuries based on data from 2020 to 2024. Post-crash timelines in MDC routinely exceed the window in which whole blood offers the strongest survival benefit. The median dispatch-to-hospital time of 29 minutes, paired with the critical need for transfusion within 20 minutes, underscores a substantial care gap in the local trauma system in MDC. Geographic and operational challenges across MDC's multilane expressways, rural western corridors, and densely populated urban centers further extend transport times, particularly in the western, southern, and rural areas located farther from centrally and easternly positioned trauma centers. These delays are driven by longer travel distances, limited roadway access, and chronic congestion on major corridors such as US-1 and throughout the northeastern urban core.

Trauma impact is also disproportionately concentrated in MDC's historically underserved communities. MDC has formally identified a group of Targeted Urban Areas experiencing persistent socioeconomic hardship, limited health access, and higher incidences of violence and roadway trauma. These neighborhoods include: Carol City, West Coconut Grove, Florida City, Goulds, Leisure City, Liberty City, Little Haiti, Model City/Brownsville, Naranja, Opa-locka,

Overtown, Perrine, Princeton, Richmond Heights, West Little River, sections of South Miami, the Homestead/South Dade region, and major corridors such as NW 27th Avenue, NW 183rd Street, Biscayne Boulevard, North Miami 7th Avenue, Downtown North Miami, and the West Dixie Highway corridor.

Approximately 60%–70% of the population served by MDFR, which equates to between 1.62 and 1.89 million residents, lives in census tracts classified as Underserved Communities, based on 2020 census data and FEMA/DOT environmental justice criteria. These areas also experience the highest rates of blunt and penetrating traumatic injuries leading to hemorrhagic shock, making early access to whole blood socioeconomically imperative. A prehospital whole-blood program directly addresses disparities by delivering a proven, time-critical intervention that improves hemodynamic stability and significantly increases survivability during the first 30 minutes following injury. The intervention will be geographically deployed using crash density, High Injury Network corridors, and roadway fatality data rather than generalized medical demand.

**Safety Need:** MDC faces a severe and clearly documented safety need stemming from preventable trauma deaths due to uncontrolled hemorrhage. FARS data show 1,596 roadway fatalities from 2019–2023, with a five-year average of 11.8 deaths per 100,000 residents. Despite MDC's advanced trauma networks, survivability is limited by transport interval duration and delayed access to blood products. Vision Zero data show 1,869 crash fatalities from 2019–2024, approximately 570 of which may have been related to early hemorrhage. MDFR responds to 20,093 motor vehicle crashes annually, including 9,566 life-threatening incidents and 4,426 trauma alerts in 2025. Although responders arrive in a median 9 minutes, dispatch-to-hospital intervals average 29 minutes, which exceeds the optimal transfusion window. These delays are most severe in western, southern, and rural portions of MDC as well as in congested urban cores, disproportionately impacting underserved communities and underscoring the socioeconomically imperative need for earlier access to LTOWB. MDC proposes to launch the MDC Whole Blood Program to address this issue by deploying (8) whole blood–equipped critical care response vehicles and equipping two air rescue helicopters with coolers and staff trained to carry LTOWB and administer transfusions to trauma patients meeting evidence-based shock criteria. This project recognizes that while crashes may still occur, fatalities should not be inevitable.

**Safety Impact:** This Program is expected to reduce crash-related fatalities by enabling earlier initiation of lifesaving transfusions. MDC recorded 1,596 roadway deaths from 2019–2023, with a five-year fatality rate of 11.8 per 100,000 residents. Research demonstrates an 11% increase in mortality for each minute of delay in receiving whole blood (Duchesne et al., 2024). By implementing this program, MDFR can deliver transfusions at the scene or en route, substantially narrowing the care gap created by MDC's 29-minute median dispatch-to-hospital time. MDFR anticipates measurable reductions in preventable hemorrhagic mortality among eligible trauma patients based on published trauma literature supporting early whole blood administration. Outcome goals include a 20% mortality reduction from current mortality trend, 15% faster hemodynamic stabilization as measured by protocolized vital reassessments performed pre and post transfusion improved 60-minute and 24-hour survival, with the greatest benefit in high-risk and underserved areas, as they are furthest from the trauma centers and definitive care, and a goal of starting intervention within 15 minutes of MDFR dispatch to the scene. Program outcomes will be analyzed quarterly through collaboration between MDFR, trauma center partners, and the MDC Vision Zero team. Findings will inform future Vision Zero Action Plan updates and support development of scalable national post-crash care models.

**Implementation Costs:** Implementation Costs details are included in the MDFR-SS4A-FY26-Planning-Demo-Supplemental-Estimated-Budget. The total project cost is **$4,257,420.** MDC is requesting grant funding in the amount of **$3,405,936** and is committed to a twenty percent match of **$851,484.** Projects costs include the salary and fringes of a Program Coordinator and Program Assistant, (7) whole blood transport vehicles, (1) program coordinator vehicle, the retrofit of (2) air rescue helicopters for blood-ready capabilities, blood, coolers, and proper storage equipment, whole blood administration supplies, manikins for whole blood trainings, and training costs for up to 60 EMS captains. MDFR will oversee data collection and program evaluation, supported by MDFR's personnel and operational resources.

**Engagement and Collaboration:** The program is built on strong interagency partnerships between MDFR, MDC's Level 1 and Level 2 Trauma hospitals, regional blood centers, the MDC Vision Zero team, and community stakeholders. Medical oversight of the program will lead by MDFR's Medical Director and Associate Medical Director. Local Trauma hospitals will provide quality review through their Trauma Peer Review process which MDFR is already actively engaged in for data integration and continuous protocol refinement. Vision Zero will incorporate program outcomes into future High Injury Network updates and Action Plans. MDFR is seeking collaboration with local hospitals and trauma centers for whole blood exchange programs to keep waste of whole blood due to expiration to an absolute minimum. Collaboration with national trauma organizations ensures alignment with current best practices. Program outcomes will be analyzed quarterly through collaboration between MDFR, trauma center partners, and the MDC Vision Zero team. Findings will inform future Vision Zero Action Plan updates and support development of scalable national post-crash care models.

**Project Readiness:** MDC is prepared to initiate implementation immediately upon award. MDFR has identified vehicle platforms, equipment specifications, storage solutions, and deployment zones using GIS analyses of trauma patterns and High Injury Network data. Air Rescue is fully operational and prepared to integrate blood carrying capabilities. Procurement pathways, training curricula, and quality assurance processes are established. MDC maintains long standing relationships with level 1 and level 2 trauma centers and blood suppliers to support seamless coordination, medical oversight, and outcome tracking. MDC's operational capacity, data systems, and cross-agency collaboration make the program implementation-ready. Following the 2 year demonstration period, MDFR intends to sustain the Whole Blood Program through departmental operating budgets and continued partnership with regional trauma centers and blood suppliers. Consumable replacement, training recertification, and equipment lifecycle costs will be incorporated into future operational planning to ensure long-term program continuity. The proposed program timeline is as follows: **Months 1–3:** Procurement of equipment and blood storage systems; **Months 3–6:** Development of protocols and QA/QI systems; **Months 4–9:** Personnel training and certification; **Months 6–12:** Vehicle and aircraft purchasing/retrofitting; **Year 1:** Initial operational deployment; **Years 1-2:** Full implementation, evaluation, and data reporting; **Year 2:** Sustained operational integration.

**Conclusion:** The MDC Whole Blood Initiative will strengthen prehospital trauma care, reduce preventable crash fatalities, and advance Vision Zero goals by closing the critical time-to-transfusion gap. MDC respectfully requests SS4A Demonstration Grant funding to implement this lifesaving program, which will also serve as a scalable national model for integrating prehospital blood transfusion into transportation safety systems.

| SS4A Planning and Demonstration Grant Application - Supplemental Estimated Budget | | | |
|---|---|---|---|
| **Supplemental Estimated Budget** | | | |
| **Itemized Estimated Costs of Demonstration and Pilot Activities (if applicable)** | | | |
| **Activities** | **SS4A Federal Funding Request (80%)** | **SS4A Non-Federal Match (20%)** | **Total SS4A Project Cost** |
| **Demonstration/Pilot Activity #1** | **$ 3,405,936.69** | **$ 851,484.17** | **$ 4,257,420.86** |
| ***Personnel (Program Coordinator)*** *- Salary for newly bided MDFR Captain position on a 40 hour shift. The position will be overseeing the program as the "Program Coordinator" for the 2-year period. This position is critical to managing the program's complexity including regulatory compliance, inventory control, interagency coordination, training oversight, and quality assurance. In charge of the program "QA, stats, operations, and supervision"* | *$ 246,182.40* | *$ 61,545.60* | *$ 307,728.00* |
| ***Fringe (Program Coordinator)*** *- Fringes for newly bided MDFR Captain position on a 40 hour shift. The position will be overseeing the program as the "Program Coordinator" for the 2-year period. (Fringe includes FICA/MICA/Retirement/Life Insurance)* | *$ 173,163.20* | *$ 43,290.80* | *$ 216,454.00* |
| ***Personnel (Program Assistant)*** *- Salary for newly bided MDFR Lieutenant position on a 40 hour shift. The position will be assisting the program as the "Program Assistant" for the 2-year period. The person in this position will assist the Program Coordinator with trainings and will also pick up the blood products from designated locations and ensure distribution of it to the units. This position will also be responsible for the logistics of the program and will be available when operations are occurring outside of the Program Coordinator's 40 hour shift.* | *$ 192,649.60* | *$ 48,162.40* | *$ 240,812.00* |
| ***Fringe (Program Assistant)*** *- Fringes for newly bided MDFR Lieutenant position on a 40 hour shift. The position will be overseeing the program as the "Program Assistant" for the 2-year period. Fringe includes (FICA/MICA/Retirement/Life Insurance)* | *$ 137,734.40* | *$ 34,433.60* | *$ 172,168.00* |
| ***Equipment*** *- to support Whole Blood Program (7 Battalion/EMS Captain Vehicles and 1 Program Coordinator Vehicle @ $137,621.00 ea.) for the transport of whole blood products; 2026 Ford or similar F350 4x4 SD Crew Cab 6.75" Box 160" WB SRW XL @ $56,615.00 ea., for 8 units total for the transport of whole blood products; APRU- Autonomous Portable Refrigeration Unit, 6L @ $12,195.12 ea., for 13 units total, the 13 units includes refrigeration for the 8 EMS SUV vehicles, the 2 Air Rescue Helicopters, and 3 for MDFR EMT Paramedic Whole Blood/Blood Product Usage training purposes; annual subscription for each APRU freezer unit "Blood COMM Premium" subscription @ $2,600.00 each, for 13 subscriptions.* | *$ 1,396,979.65* | *$ 349,244.91* | *$ 1,746,224.56* |
| ***Supplies*** *- to support the implementation of theWhole Blood Program for the 2 year period. Please note, the following prices are for 1 year, and will be doubled. {150 units of Whole Blood or blood products @ $1,200 each)(150 Rapid Infuser Devices @ $500 each, 150 Blood Administration Sets @ $28 each, 2 Temperature Monitors @ $445 each, 100 Boxes of Tranexamic Acid @ $89 each, 4 Junctional Tornquets @ $349 each, 4 Pelvic Binders @ $90 each, and 20 I-Stat Cartridges @ $200 each), 65 Rapid Infuser Plus, Rapid Blood & Fluid Infuser Sea/cs @ $302.05, 13 Blood & Fluid Warmer w/ Extra Battery Power @ $3,753.11, 65 Blood & Fluid Warmer Compact Disposable Unit (CDU) 1ea 12ea/bx @ $88.50, 13 Safe-T-Vue Blood Temperature Indicators, 6 Degrees C @ $101.44, 13 EMS Emergency Backpack, Blue, BBP Resistant, 22 in H x 17 in W x 8 in D @ $258.29, 13 Forehead thermometer, with moving line temperature strip, 84-106 degrees, 50/bx @ $67.52, 65 emergency Blanket, Silver Mylar Emergency, 52 in x 82 in 200ea/cs @ $0.51, 13 Blood warmer Extension Cable for all Models @ $192.89.* | *$ 571,227.44* | *$ 142,806.86* | *$ 714,034.30* |
| ***Training*** *- 8 trauma bleeding Manikins Task Trainers @ $100,000 each for realistic training on the administering of whole blood and EMS Captain training for up to 60 EMS Captains @ $60K total (includes overtime costs and fringes for backfill of training personnel)* | *$ 688,000.00* | *$ 172,000.00* | *$ 860,000.00* |
| **Subtotal Budget for Demonstration and Pilot Activities** | **$ 3,405,936.69** | **$ 851,484.17** | **$ 4,257,420.86** |
| **Total Budget for Planning and Demonstration Activities** | **$ 3,405,936.69** | **$ 851,484.17** | **$ 4,257,420.86** |

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|---|---|---|---|
| **Total Budget for Planning and Demonstration Activities (Rounded for Application Purposes)** | **$ 3,405,936** | **$ 851,484** | **$ 4,257,420** |