

621 Woodland Square Loop SE  
Lacey, WA 98503  
PO Box 47250  
Olympia, WA 98504-7250  
<https://www.utc.wa.gov/GCPF>

**GRADE CROSSING PROTECTIVE FUND**  
2023 – 2025 GRANT APPLICATION  
OPEN CALL FOR PROJECTS

Received  
Records Management  
Oct 26, 2023

The Washington Utilities and Transportation Commission (UTC), through the Grade Crossing Protective Fund (GCPF), provides grants for projects that eliminate or reduce public safety hazards at railroad crossings and along railroad rights-of-way in Washington State. Any public, private, or non-profit entity may apply for a GCPF grant.

To apply for a grant to eliminate or reduce a public safety hazard at a railroad crossing or along a railroad right-of-way, complete the following information and submit it and any attachments to the UTC. *(Note: If you are proposing a change to the warning devices at a public railroad crossing, use the Petition to Modify Warning Devices - GCPF application instead.*

Please be sure to complete the entire form. Incomplete or missing information will delay the grant review process.

**Applicant information**

Contact Name:

Organization:

Address:

Phone:

Email:

**Project information**

Attach additional sheets as necessary that provide the following:

1. What is the project location?

2. What are the existing hazards being addressed? Include any information about accidents or incidents at the site including photographs or other materials that support the application.

See supporting document.

3. How will the project eliminate and/or mitigate the hazards listed above? Include any design drawings or construction plans for the proposed project.

See supporting document.

4. How will the project benefit public safety by a) reducing accident frequency and severity at the location and/or b) reduce trespasser, pedestrian, or motorist injuries and deaths on the railroad right-of-way?

See supporting document.

5. Does the project involve coordination with the railroad? Yes  No

If yes, please provide the railroad contact information:

See supporting document.

6. Does the project support under-resourced communities and/or rural areas? Yes  No

If yes, please describe.

See supporting document.

7. Provide a project budget, including:

a. An itemized list of the total costs of the project.

See supporting document.

b. The requested grant amount.

See supporting document.

c. Names of parties contributing financially to the project, including the applicant, and the amount each is contributing.

See supporting document.

8. What is the name of the party responsible for long-term maintenance of the project, such as repair of fencing?

See supporting document.

9. What is the estimated timeline for project completion?

See supporting document.

10. How will the project's success be measured?

See supporting document.

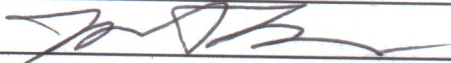
11. What is the applicant's experience in grant management or the successful completion of grant projects of this nature, including years of experience, types of projects completed and project cost/scope?

See supporting document.

12. List any other information that may be useful in evaluating this project. Include additional attachments if needed.

See supporting document.

13. I hereby affirm that, to the best of my knowledge, the information provided in this application is true and accurate.

Michael R. Lawson 

**Railroad Consent**

If the applicant is not the railroad owning the right-of-way, crossing, or tracks, the applicant must submit the attached Railroad Consent form (page 5) completed and signed by the railroad owning the right-of-way, crossing, or tracks.

**Submitting the Application**

After completing the application, file the signed application at EFile. Under "Filing Type," select "Application for Funding."

**Assistance**

For questions or assistance, please contact the following UTC staff:

- Mike Turcott at (360) 664-1119 or [mike.turcott@utc.wa.gov](mailto:mike.turcott@utc.wa.gov)
- Tyler Whitcomb at (564) 669-0943 or [tyler.whitcomb@utc.wa.gov](mailto:tyler.whitcomb@utc.wa.gov)

## Railroad Consent

The undersigned represents the Railroad Company in the accompanying GCPF application.

We have reviewed the application and are satisfied that the conditions are the same as described by the applicant in this matter.

Printed name of Railroad Representative

Signature of Railroad Representative

Title

Name of Railroad

Mailing Address of Railroad

Telephone Number

Email

January	1	2023
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Date

## Overview

This is a follow up grant request after being awarded in 2022 for the purchase of 1 hazmat drone. We requested 2 drones in 2022. UTC awarded South King Fire for the purchase of 1 drone with the expectation that we would get the drone program up and running and train pilots for the use on hazardous materials incidents. We were invited to submit another grant request in 2023 for the purchase of the 2 drone. I am using the same document from the 2022 request with slight modifications based on the updated grant form. I do not have the addendums that were included in the 2022 request. I'm hoping that information is on file with UTC, so I'm going to keep the reference but not include the addendums.

On behalf of the South King Fire Hazmat Team, I'm submitting a proposal for (1) Hazmat Drone. Hazmat 361 (addendum A) is a special operations team that responds out of Station 61 located at 3203 S 360<sup>th</sup> Auburn, WA 98001. The team consists of 12 firefighters that are certified Hazmat Technicians with the ability to respond, assess, and mitigate any hazardous materials incidents within the King County Zone 3 area. Hazmat 361 is the first responding hazmat unit for any railroad or rail crossing incident that involves hazardous material spills. Hazmat 361 is also a part of the Zone 3 Hazmat providers group that includes Renton Fire, Port of Seattle Fire, and Puget Sound Regional Fire Authority. Zone 3 Hazmat providers respond to all major hazmat incidents in South King County.

I am applying for the UTC grade crossings grant to increase the response capabilities of our hazmat team. This proposal will increase the ability to quickly assess and mitigate the hazards associated with the railroad crossings in the Auburn valley area. No hazmat team in Zone 3 currently has this capability.

### **This grant proposal is for the purchase of a 2nd Hazmat Drone.**

1. King county regional asset based in South King Fire station 61 located at 3203 S. 360th St. Auburn, Wa 98001
2. The hazards being addressed with this grant request would be all the hazardous materials that are carried by rail through the Auburn valley. Between BNSF and UP, there are more than 75,000 loads of hazardous materials that are transported through the Auburn valley on a yearly basis. Accidents at grade crossings with private or commercial vehicles have a potential for a rail car derailment that could result in a large scale hazmat incident. I have included a map and list of up to 20 grade crossings in the Auburn valley area (addendum B). I have also included a list of WA Rail Crash Stats (addendum C) that show the potential for future incidents. In the event of a train crash at a rail crossing, it is likely that the surrounding community could be in danger from the hazardous materials spill or the involvement of fire. Timely assessment and evacuation will help mitigate these hazards.

3. The proposed project will be to purchase a 2<sup>nd</sup> drone. The South King Fire Hazmat team have created a drone program for hazardous material responses and train derailments based on the grant funding from UTC in 2022. The first step in responding to train derailment is to find out where and what is involved in the incident. In the event of an accident at a grade crossing, the railcars involved in the derailment could be a long distance away from the actual grade crossing. A drone can be deployed in minutes and sent down range to gather important information including the number of cars involved, access locations or impediments, type of rail cars involved, railcar markings and car number, load limit, empty weight of car, placards, and pressure relief device information. Gathering this much information in short time frame, would be instrumental in eliminating or mitigating the hazard to the public and first responders. Drones can be flown down range in a matter of minutes, rather than suiting up hazmat technicians which can take 30-60 minutes and require additional resources such as backup and decon teams. Distance and access issues could also delay the gathering of important information. If a fire is involved, the thermal imaging camera on the drone can locate the seat of the fire, or changes in temperatures within rail cars that can indicate a chemical reaction of the products being transported. The thermal camera can also be used to locate victims or persons in the area that may be in danger. I have included several documents that show the benefits of a drone program and examples of how this program will help mitigate hazards (addendum D, E, F, G, H). The purchase of a second drone will allow a backup drone to be available in the case of a failure. If the battery of the first drone gets low, the second drone can be deployed while the first drone is recharging. At a large incident, both drones could be deployed to cover more area and get video from different viewpoints. The second drone will increase the overall in air time available to gather information.
4. The implementation of this proposal will have an immediate impact on the ability of the South King Fire Hazmat Team to mitigate hazardous situations that pose a threat to the life and safety of the surrounding community. With the number of grade crossings in our area and the likelihood of a grade crossing being a contributing factor in potential incidents, it is important to have this unique capability. The ability to obtain critical information in a short amount of time will help mitigate hazards. As a Zone 3 hazmat provider, Hazmat 361 will be a part of any large hazmat responses in the zone. The drone program can be used on a variety of calls anywhere within the zone.
5. The project does not involve coordination with the railroad to be put in place. However, we do have a working relationship with the railroad and conduct annual training drills on site at railroad locations.
6. This project does support under-resourced communities since South King Fire is the only fire department in Zone 3 with a drone program.

7. I have included in this request packet an updated quote from the same supplier that was used in the 2022 grant award. The price of the same drone has come down. The total for the 2<sup>nd</sup> drone will be \$10,212.98. This will include: Autel EVO MAX 4T bundle, extra battery, extra propellers, charging system, launch pad, launch pad light.

b. \$10,212.98

c. Michael R. Lawson – Captain  
[mike.rlawson@southkingfire.org](mailto:mike.rlawson@southkingfire.org)  
253-632-4246  
South King Fire Station 61  
3203 S 360<sup>th</sup> St. Auburn, WA 98001

Kuker Ranken “KR”  
21601 66<sup>th</sup> Ave W, Unit A  
Mountlake Terrace, WA 98043  
425-771-7776

Autel Robotics  
22522 29<sup>th</sup> Dr SE, Ste 101  
Bothell, WA 98021  
844-692-8835

Federal Aviation Administration  
800 Independence Avenue, SW  
Washington, DC 20591  
866-835-5322

The Security and Emergency Response Training Center (SERTC)  
55500 DOT Rd.  
Pueblo, CO 81001

8. South King Fire will assume responsibility for long-term maintenance and repairs.
9. The core of the project has been completed following the 2022 grant award. The purchase of the 2<sup>nd</sup> drone will be placed immediately upon being awarded. Delivery should be about 1 month and the drone will be immediately placed into service.
10. Success of this project will be demonstrated by creating a policy, training, and FAA certification. Hazmat 361 participates in Zone 3 hazmat drills on a weekly basis as well as mission specific quarterly drills such as the most recent drill at the Auburn railyard with BNSF (addendum M). Success will be demonstrated



during drills by deploying drones and obtaining critical information for the incident commander. This will show that the drone program is ready and available to help mitigate hazards to the public and emergency response personnel. South King Fire has FAA certified Part 107 pilots, and our current drone is in service.

11. South King Fire has managed numerous grants, both local, state and federal. The hazmat team was award 2 grants from UTC in 2022 (1<sup>st</sup> drone, and separate award for weather station that works in support of the drone program as well as all hazmat operations). The hazmat team is also a participant in the Safer Cities grant through Seattle Police/Fire.
12. Any additional information or addendums should be able to be found within the 2022 grant request. Please let me know if any more information is needed.

**KR**

**Remit To:**  
 21601 – 66th Ave W, Unit A  
 Mountlake Terrace, WA 98043, USA  
 Tel: 425-771-7776 | Fx: 425-774-7538

A TRADITION IN PRECISION  
 Since 1928

# Quotation

Date	Number
10/16/23	

SO-500305

**Bill To:**

SOUTH KING FIRE & RESCUE  
 35100 PACIFIC HWY SOUTH  
 FEDERAL WAY, WA 98003, USA

**Ship To:**

SOUTH KING FIRE & RESCUE  
 35100 PACIFIC HWY SOUTH  
 FEDERAL WAY, WA 98003, USA

Ent. by:	Sales Rep.:	Picked by:	Packed by:	No. of Parcels:	Weight:	Page No.:
Darrell Madison	70-DARRELL					1 of 1

Cust. Acct. No.		Customer P.O. No.		Order Date	Ship Date	F.O.B. Point	Ship Via	Terms	
1017734		MICHAEL LAWSON		10/16/23	10/17/23	BOI-RET	05-BEST	<b>COD</b>	
Ordered	Shipped	Back Ordered	Unit	LOC	Serial Number	Catalog No. / Description		Unit Price	Extension
1.00	1.00	-	ea		HAR923207122	102001823	AUTEL EVO MAX 4T BUNDLE	8,999.00	8,999.00
3.00	3.00	-	ea			102001961	AUTEL EVO MAX BATTERY	319.00	957.00
2.00	2.00	-	ea			102002080	AUTEL EVO MAX PROPELLERS (1 PAIR)	19.00	38.00
1.00	1.00	-	ea			102002081	AUTEL EVO MAX SINGLE CHARGE+CABLE	79.00	79.00
1.00	1.00	-	ea				HDLP HOODMAN LAUNCH PAD 5'	119.99	119.99
1.00	1.00	-	ea				HULTKIT HOODMAN 3' & 5' LAUNCH PAD LIGHT KIT	19.99	19.99
						<b>SUBTOTAL</b>	<b>SHIPPING</b>	<b>TAX</b>	<b>TOTAL</b>
						10,212.98	0.00	0.00	10,212.98

**KR - Seattle Branch**

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