

Preparation for Utah Earthquake Early Warning

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Requester Information

Legislator: Owens, Doug

Creation Date: 2024-01-19

Submission Date: 2024-01-20

Section 1: Request Details

Description:

This funding request will support preparing for the implementation of an Earthquake Early Warning (EEW) system in Utah by modernizing and upgrading existing seismic instruments and the data transmission/telemetry system to be compatible with an EEW system.

Legislative designee contact information:

- Name: R. William Keach II
 - Organization: Utah Geological Survey
 - Position: Director (Keach), Geologic Hazards Program Manager (Bowman)
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Section 2: Funding Information

How will the appropriation be used?

One-time

Ongoing

Personnel Services	2024: \$0.00 2025: \$900,000.00	\$900,000.00
In-State Travel	2024: \$0.00 2025: \$160,000.00	\$0.00
Out-of-state Travel	2024: \$0.00 2025: \$0.00	\$0.00
Supplies and Equipment	2024: \$0.00 2025: \$400,000.00	\$0.00
Technology Purchases	2024: \$0.00 2025: \$3,370,000.00	\$0.00
Infrastructure/Capital Investments	2024: \$0.00 2025: \$0.00	\$0.00
Other Charges/Pass Thru	2024: \$0.00 2025: \$210,000.00	\$210,000.00

Expenditure Total

One-time 2024	One-time 2025	Ongoing 2025
\$0.00	\$5,040,000.00	\$1,110,000.00

Funding Sources:

General Fund

- Amount Requested 2024 (One-time) \$0.00
- Amount Requested 2025 (One-time) \$5,040,000.00
- Amount Requested 2025 (Ongoing) \$1,110,000.00

Revenue Total

One-time 2024	One-time 2025	Ongoing 2025
\$0.00	\$5,040,000.00	\$1,110,000.00

Should unused funding be returned to the state at the end of the fiscal year?

No

Is this project scalable if the Legislature does not fund the full requested amount?

Yes

A short explanation describing how the project might be scaled

If reduced funding is provided, the project will scale down by reducing the number of upgraded seismic stations and portions of the data transmission/telemetry system.

Section 3: Agency Information

Subjects:

Land and Environment

Safety and Security

Agency:

560 / Natural Resources

Type of entity to receive pass-through funding

- State Government
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Section 4: Performance Outcome Measurement

Who would benefit from this request (who is the target audience)?

All Utahns will benefit from the implementation of an EEW system in Utah by reducing the life safety and economic risk from a major, damaging earthquake. The Federal Emergency Management Agency estimates \$80 billion in short-term economic losses for a major earthquake on the Wasatch Front.

What is this project or program intended to accomplish?

This initial project is intended to upgrade the existing, state-owned seismic instrumentation and data transmission/telemetry infrastructure to be compatible with the implementation of an EEW system in Utah, and will provide leverage in securing federal funding for an implementation and operation partnership with the federal U.S. Geological Survey.

How will the Legislature know whether the project or program achieved its intended purpose?

A performance measure for this project would be the number of upgraded seismic instrument sites that would be ready for the implementation of an EEW system. The number of sites would be dependent on the appropriated funding amount.

Section 5: Other Supporting Documents

Intent Language

The Legislature intends that funding will be allocated to the Utah Geological Survey which will then distribute funding to the University of Utah and Division of Emergency Management to upgrade seismic instrument sites.

Previous State Funding

This program has received no previous funding. The Legislature previously funded a feasibility study but that was a distinct entity.