

General Project Information: Redundant Fiber for Terminal and Air Traffic Control

City of Eugene
COAR Application 2022

Application Year: 2022
COAR-2022-EUG-00011

Applicant

Organization Name

City of Eugene

Contact Person *

Cathryn Stephens

Address

28855 Lockheed Dr.

Contact Person Title *

Acting Airport Director

City

Eugene

State

Oregon

Zip Code

97402

Phone Number

(541) 682-6638

Email

CStephens@eugene-or.gov

Project Name and Location

Project Name *

Redundant Fiber for Terminal and Air Traffic Control

Project Location *

Eugene, Oregon

ODOT Region:

Region 2

County tax parcel identification number(s): *

999951; 350098; 350148; 349959; 349967; 111937; 349975; 1317237; 1317229; 1317211; 489078; 4890003; 1258829; 349736; 349512; 349736; 1317625; 1286242; 54252; 54161; 1495298; 1296910; 54153; 54245; 349512; 1586666; 1625324; 1625316; 1625316; 1621752; 1661766; 4123772; 54112; 54138; 350254; 54120; 1586666; 1132198

For convenience, if you have these compiled, please upload them here:

https://odae-grants.com/_Upload/14315_1100937-10454_1099172-TaxLotMap.pdf

Airport Information

Airport Name: *

Eugene Mahlon Sweet Airport
(EUG)

Airport Category: *

Category 1a

NPIAS or Non-NPIAS: *

NPIAS

Project Overview

Select the type of project being proposed: *

Program Implementation

Select the category of project for which you are requesting funding: *

Emergency preparedness and infrastructure projects in accordance with the Oregon Resilience Plan

Project Start Date:

6/1/2022

Project End Date:

6/1/2023

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Project Summary *

Provide a brief summary of the project in the space provided below:

The Eugene Airport (EUG) and local Federal Aviation Administration (FAA) operations are supported by a single fiber-optic network. Without any backup systems in place, all it takes is one point of failure in a network to disrupt or shut down air traffic operations at EUG. Redundancy in the network helps to eliminate single points of failure, ensure better network stability and uptime in the face of events that would otherwise disrupt operations at EUG.

Project Purpose and Description *

Provide a purpose and description of the project in the space provided below:

The purpose of this project is to construct a redundant fiber-optic system to support operations at the Eugene Airport (EUG). The proposed project will install new airport-owned fiber-optic cable, conduit, and associated infrastructure and document new fiber optic cable paths. The project will provide a new high-speed backbone network that will ensure continuous operations at EUG.

Clearly define the proposed project in each of the following areas:

• **Does the project eliminate current deficiencies listed in the current Oregon Aviation Plan? ***

✓ Yes No

One of the goals of the Oregon Aviation Plan is to ensure that information and communication systems in the state of Oregon are made resilient against a disaster. It is critical for the airport to continue its operations when disasters strike. By having fiber network redundancy, we can ensure that Eugene Airport will be able to continue its operations, Air Traffic Controllers will be able to communicate to the pilots, and airlines will be able to communicate to the ground handlers to keep the airport open and operational.

• **Does the project modernize the airport by exceeding state or federal minimum standards as stated in the current Oregon Aviation Plan and identified by the Federal Aviation Administration Advisory Circulars or other regulations? ***

✓ Yes No

The Oregon Aviation Plan identified Eugene Airport (EUG) as one of the airports that has a potential to maintain or quickly restore operational functions after a major earthquake. Additionally, FAA Advisory Circular 93-3 requires communication between pilots, Air Carrier Operations and local Air Traffic Control related to TARMAC delays. This project will prevent disruption on communications and support recovery efforts in the event of a disaster, and will ensure communications between the airport, Air Traffic Control and the airlines.

• **Does the project prevent future deficiencies and preserve the existing facilities? ***

✓ Yes No

In the event of disaster, with only one source of fiber, Eugene Airport could become non-operational. This project will prevent future deficiencies by having multiple fibers connect to Eugene Airport.

• **Does the project increase the financial self-sufficiency of the airport? ***

✓ Yes No

Fiber network redundancy will ensure that Eugene Airport's communication is protected against disasters of any kind. One fiber source leaves Eugene Airport open to the possibility of becoming inoperable should a disaster disrupt that one source. Any disruption in airport operations means the loss of revenue and increased expense to the airport, affecting our ability to be self sufficient.

• **Does the project have local support? ***

✓ Yes No

See attached letters of support from Eugene Chamber of Commerce, Springfield Chamber of Commerce and Travel Lane County.

Project Documentation: Redundant Fiber for Terminal and Air Traffic Control

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Documentation and Permits

Was the Airport Layout Plan (ALP) Completed within the last 10 years? *

Yes No Underway

Date of Completion: 3/1/2018

Anticipated Date of Completion: _____

If no, provide reasoning:

Is a NEPA review required? *

Yes No

Please select the applicable review type:

If 'Other' is selected, please describe the type of NEPA review in the provided field below.

Note any required permits, date issued or expected issue date, completion status, and required status. Permits may include, but are not limited to: right-of-way permits, land acquisition permits, building permits, etc.
Click the **"SAVE"** button to add additional rows.

Permit Type	Date Issued	Completion Status	Required Status
Right of Way Permit from the City of Eugene			Required
Right of Way Permit from Lane County			Required
Right of Way Permit from Oregon Department of Transportation if new infrastructure is necessary			Required

Statewide Impact: Redundant Fiber for Terminal and Air Traffic Control

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Statewide Impact of Project

Per **ORS 367.084(6)**, the following questions apply:

Does the proposed project reduce transportation costs for Oregon businesses or improve access to jobs and sources of labor? If yes, provide a short explanation. * Yes No

This project protects businesses from Eugene Airport shutdown due to loss of communication ability resulting in loss of access to travel and air cargo delivery, possibly leading to loss of revenue and jobs.

Does the proposed project result in an economic benefit to the state? If yes, provide a short explanation. * Yes No

Airports are important to the community because they provide local businesses with access to the global market. By ensuring that Eugene Airport is resilient and continues to be operational when disaster strikes, support for business will be able to continue and thus provide jobs and economic prosperity for the area.

Is the proposed project a critical link connecting elements of Oregon's transportation system that will measurably improve utilization and efficiency of the system? If yes, provide a short explanation. * Yes No

The Oregon Aviation Plan identified Eugene Airport as one of the airports that has a potential to maintain or quickly restore operational functions after a major earthquake. This project will prevent disruption on communications and support recovery efforts in the event of a disaster.

Is the proposed project ready for construction or implementation? * Yes No

The majority of the infrastructure is already in place. Additional conduit may need to be constructed to support the new fiber-optic line.

Does the project have any unique construction-readiness, project implementation issues, or possible delays? * Yes No

Does the proposed project have a useful life expectancy that offers maximum benefit to the state? If yes, provide a short explanation. * Yes No

A study by Nevada Department of Taxation indicates that fiber-optic cable has a service life of 20 years for fiber-optic cable placed in service in 2008 and thereafter. Corning, a principal manufacturer of optical fiber, states that the intended service life for optical fiber cables often is in excess of 25 years. Internal Revenue Service classifies buried cable and conduit with a life of 26.5 years for depreciation purposes.

Budget: Redundant Fiber for Terminal and Air Traffic Control

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Is this project currently listed in your approved Federal CIP? *

Yes No

Federally Funded Projects *

FAA Funding Breakdown		
Federally Funded Projects		0 %
FAA AIP Grant Match Requirement from Sponsor		0 %
Total Project Cost	\$0	100 %

Non-Federally Funded Projects *

Total Project Cost

Project Funding Breakdown

Provide the funding source and the amount of funding from that source.

	Percent of Project Cost
Minimum Program Match Requirement:	50%

Source of Match Funds *	Amount	Date Available
FAA grant funds	\$0	
Airport Enterprise Fund	\$350,000.00	6/1/2021
Total Match Funds:	\$350,000.00	70 %

Aviation Project Funding Request to ODA *

Amount requested from ODA:	\$150,000.00	30 %
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Project Budget Summary

Total applicant matching funds:	\$350,000.00	70 %
Funding request to ODA:	\$150,000.00	30 %
Total Project Cost:	\$500,000.00	100 %

Pre-Agreement Expenditures *

Has the project incurred any expenditures prior to the completion of this agreement, if awarded? If yes, explain.

Yes No

* In accordance with **OAR 738-124-0045(3)(b)** "Only Project costs incurred on or after the effective date of the Agreement are eligible for grant funds."

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Please describe those pre-agreement expenditures.

Related Document Uploads

Description	Upload
Back up document for source of match funds	https://odae-grants.com/_Upload/14318_1101011-MemotoIntergovernmentalCommittee2022RedundantFiber.pdf

Miscellaneous Uploads: Redundant Fiber for Terminal and Air Traffic Control

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File Repository

Letter of Support from Eugene Area Chamber of Commerce

[14319_1101013-EUGCOARSupportLetterEugeneChamberofCommerce.pdf](#)

Person:Odette Oppe
Date:9/21/2021

Letter of Support from Springfield Chamber of Commerce

[14319_1101013-EUGCOARSupportLetterSpringfieldChamberofCommerce.pdf](#)

Person:Odette Oppe
Date:9/21/2021

Letter of Support from Travel Lane County

[14319_1101013-EUGCOARSupportLetterTravellLaneCounty.pdf](#)

Person:Odette Oppe
Date:9/21/2021

Final Report

(You must upload your Final Report prior to closeout)

[Click here to generate the Final Report form](#)

Upload

Internal Review Sheet

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Category	Applicant Response	Internal Review Score
NPIAS or Non-NPIAS Airport	NPIAS	0
Type of Project	Program Implementation	10
Project Category	Emergency preparedness and infrastructure projects in accordance with the Oregon Resilience Plan	7
Is there an existence of Airport Zoning?	Yes	5
MINIMUM Match Percentage:	50 %	50
Total applicant matching funds:	\$350,000.00 / 70 %	20
Funding Request to ODA:	\$150,000.00 / 30 %	
Total Project Cost	\$500,000.00 / 100 %	

Does the proposed project reduce transportation costs for Oregon businesses or improve access to jobs and sources of labor?

Staff Entry	Review Score
1	5

This project protects businesses from Eugene Airport shutdown due to loss of communication ability resulting in loss of access to travel and air cargo delivery, possibly leading to loss of revenue and jobs.

Does the proposed project result in an economic benefit to the state?

Staff Entry	Review Score
1	5

Airports are important to the community because they provide local businesses with access to the global market. By ensuring that Eugene Airport is resilient and continues to be operational when disaster strikes, support for business will be able to continue and thus provide jobs and economic prosperity for the area.

Is the proposed project a critical link connecting elements of Oregon's transportation system that will measurably improve utilization and efficiency of the system?

Staff Entry	Review Score
1	5

The Oregon Aviation Plan identified Eugene Airport as one of the airports that has a potential to maintain or quickly restore operational functions after a major earthquake. This project will prevent disruption on communications and support recovery efforts in the event of a disaster .

Is the proposed project ready for construction or implementation?

Staff Entry	Review Score
1	5

The majority of the infrastructure is already in place. Additional conduit may need to be constructed to support the new fiber-optic line.

Does the project have any unique construction-readiness, project implementation issues, or possible delays?

Staff Entry	Review Score
0	5

Does the proposed transportation project have a useful life expectancy that offers maximum benefit to the State?

Staff Entry	Review Score

Internal Review Sheet

1	5
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1	5

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Staff Entry	Review Score
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Does the project prevent future deficiencies and preserve the existing facilities?

Staff Entry	Review Score
1	5

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Does this project increase the financial self-sufficiency of the airport?

Staff Entry	Review Score
1	5

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Does the project have local support?

Staff Entry	Review Score
1	5

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Summary

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Application Base Score	ACT Grading	Total Final Score	ARC Priority	State Board Priority
147		147		