SKAGIT COUNTY
PUBLIC WORKS DEPARTMENT
1800 Continental Place, Mount Vernon, WA 98273-5625
(360) 416-1400 FAX (360) 416-1405

Outside Funding Sources

Year	Agency/Program	Status
2014	Puget Sound Clean Air Agency	Not eligible or did not qualify.
2015	Maritime Administration (MARAD)	Not eligible or did not qualify.
2015	Build America – Transportation Investment Center	Not eligible or did not qualify.
2016	Clean Energy Fund 2	Not eligible or did not qualify.
2016	Federal Transit Administration (FTA)	Not eligible or did not qualify.
2016	Request to State Legislator for Appropriation in 2017 Capital Budget	Not granted.
2017	Skagit County Economic Development Grant	Not eligible or did not qualify.
2017	EPA – Diesel Emissions Reduction Act (DERPA)	Not eligible or did not qualify.
2017	Surface Transportation Grant	Not eligible or did not qualify.
2017	Volkswagen Settlement	Pending
2017	Infrastructure for Rebuilding America (INFRA)	Pending
2017	Public Works Trust Fund	Has not been accepting applications but will apply when and if funded.
2017	Transportation Investment Generating Economic Recover (TIGER)	Pending - Not available in 2017 and Transportation-House spending bill for fiscal year 2018 did not include funding for the program.
2018	Real Estate Excise Tax for debt service.	Will apply for annual use of County R.E.E.T. funds.

See immediately following pages for applications, requests, and responses to above funding sources.

pscleanair.org
Puget Sound Clean Air Agency

Requesting Ideas for Diesel Pollution Reduction Projects

The Puget Sound Clean Air Agency is planning ahead for the next round of grant funding from the US Environmental Protection Agency (EPA), the Washington State Department of Ecology (Ecology), and other grant funding agencies.[1]

Is your company interested in grant funding? We are assessing the demand for grants in the harbor craft sector to partially fund projects that reduce diesel pollution.

Is your company interested in partial reimbursement for a pollution reduction project?

- Auxiliary engine replacements
- Main engine replacements
- Shore power
- Exhaust retrofits
- Conversions to alternative fuels
- Other?

We have a history of successfully obtaining and administering grants. The Clean Air Agency has successfully obtained and completed grants from EPA, the U.S. Department of Transportation Maritime Administration, and Ecology to replace and upgrade engines and implement other sustainable projects for both maritime and non-maritime sectors. Some of our current and past maritime partners include:

- American Construction (auxiliary engine replacements)
- Argosy Cruises (auxiliary engine replacements)
- Crowley (auxiliary engine replacements)
- *Fierce Allegiance* (engine upgrade kit)
- Harley Marine (total tugboat repower and auxiliary engine replacements)
- Island Tug and Barge (total tugboat repowers, auxiliary engine replacements, engine upgrades)
- King County Department of Transportation (auxiliary engine replacements)
- Victoria Clipper Cruises (auxiliary engine replacements)
- Washington State Ferries (biodiesel pilot study, engine upgrade kits)

Typical successful projects will:

1) Reduce diesel particulate matter (DPM)
2) Show good cost effectiveness – reduce the most DPM for the least amount of grant funding
3) Only happen with the help of grant funding
4) Be on vessels the operate in the waterways around King, Kitsap, Pierce, and Snohomish counties
5) Have co-benefits – fuel savings, job creation, etc.

If you have projects or ideas in mind please Beth Carper, Air Resource Specialist at (206) 689-4057 or bethc@pscleanair.org . Applications are due by April 24, 2015.

[1] Release of this announcement or selection of a partner or project for a potential grant application does not obligate the agency in any way to fund projects or proposals with the grant opportunities described herein.

Paul A. Randall-Grutter

From: Beth Carper <BethC@pscleanair.org>
Sent: Wednesday, February 10, 2016 8:36 AM
To: Rachel Rowe
Cc: Dan Berentson; Paul A. Randall-Grutter
Subject: RE: Clean Air Agency Grant Programs

Captain Rowe,

We do not have any grant programs for the type of project you are describing and Skagit County is not in our jurisdiction. However, the Environmental Protection Agency (EPA) is anticipating to release a request for grant applications this February as part of its Diesel Emission Reduction Act (DERA). You might be able to get some funding through that avenue. Sometimes they also have grants that are specific to ports that you might also look into.

You can also keep your eye out for grants from the Department of Transportation Maritime Administration (MARAD). Sometimes they have grants as well, but there is usually a research portion to those grants.

Hope that is helpful.

Regards,

Beth Carper
Air Resource Specialist
Puget Sound Clean Air Agency
206-689-4057

From: Rachel Rowe [mailto:rrowe@co.skagit.wa.us]
Sent: Tuesday, February 09, 2016 9:00 PM
To: Beth Carper
Cc: Dan Berentson; Paul A. Randall-Grutter
Subject: Clean Air Agency Grant Programs

Beth,

Skagit County is considering replacing it current vehicle and passenger ferry with an all-electric ferry. Would you have any grant programs (either available now, or in the near future) for this type of project. Or, are you guys considering any re-power or alternate fuel programs becoming available any time soon?

Thank you for your time,

Captain Rachel Rowe
Ferry Operations Division Manager
Skagit County Public Works
Anacortes Terminal - 500 I Ave. Anacortes, WA 98221
Ferry Office: (360) 293-6433 Cell: (360) 333-1496
Direct Line: (360) 416-1466 Fax: (360) 293-1899
rrowe@co.skagit.wa.us
www.skagitcounty.net/ferry

Paul A. Randall-Grutter

From: Beth Carper <BethC@pscleanair.org>
Sent: Thursday, April 09, 2015 9:07 AM
Cc: anthony.b.thomas@cummins.com; bmossey@pac-power.com; bob@merequipment.com; bobc@dunlaptowing.com; boyer@boyertowing.com; brian@campbellmaritime.com; brown.dan@epa.gov; bvesely@valleypsi.com; camkristenson@samsontug.com; capteof@aol.com; catherine@soundexp.org; cblazevich@ncpowersystems.com; ccostanzo@vesselalliance.com; chris.blasko@hattonmarine.com; chrisj@stabbertmaritime.com; cpuckett@northern-lights.com; daniel.smith@crowley.com; daniel.yuska@dot.gov; david@merequipment.com; dbrunson@mansonconstruction.com; dbryan@victoriaclipper.com; derrick.white@crowley.com; dkelley@westerntowboat.com; donez.francisco@epa.gov; donw@argosycruises.com; drew@whales.com; dwalla1 @co.pierce.wa.us; ellenz@northlandservices.com; erik.ellefsen@itbco.com; fabart@co.whatcom.wa.us; freddahljr@aol.com; fvan461@ecy.wa.gov; gedlund.j@portseattle.org; geoff.conrad@cummins.com; gerald.r.west@EMDiesels.com; glight@cascadeengine.com; glight@cascadeengine.com; Gregs@merequipment.com; gregg@starmarinetugs.com; ingi.huswick@hattonmarine.com; jjacoby@victoriaclipper.com; jjordan@portoftacoma.com; Beth Carper; john.d.dwyer@uscg.mil; johnc@kitsaptransit.com; johnf@northern-lights.com; johnson.roxanne@epa.gov; jones.s@portseattle.org; joseph.weiler@seattle.gov; jtodd@pacificdda.com; justin.avril@kirbycorp.com; krosenkr@arb.ca.gov; mattc@americanconstco.com; mboy461@ecy.wa.gov; mike@merequipment.com; MichaelH@merequipment.com; mmiller@cascadeengine.com; mmiller@hmsgm.com; mstiefel@harleymarine.com; paul.brodeur@kingcounty.gov; pcrow@hmsgm.com; pedersenp@co.wahkiakum.wa.us; Rachel Rowe; ralphp@argosycruises.com; Ron.Panzero@kingcounty.gov; rpepperson@doc1.wa.gov; rstuart@portoftacoma.com; sayele@mitsubishi-engine.com; seattle@klassenengine.com; shayman@foss.com; steveb@americanconstco.com; stout.alan@epa.gov; tcoultas@orionmarinegroup.com; watson.e@portseattle.org; zacha@americanconstco.com; Amy Fowler; Elizabeth Gilpin
Subject: New Harbor Craft Grant Opportunities!
Attachments: Annoucement for HC Grant Opportunities.pdf

Good morning,

It is grant season and the Puget Sound Clean Air Agency wants to be ready. We are interested in doing more projects in the harbor craft sector.

Our auxiliary engine replacement program has been very successful and we are determining the potential of expanding this program or doing other emission reducing projects with harbor craft.

Please see the attached flyer for more information about who has partnered with us in the past and what type of projects have been successful.

If you are interested please contact me for an application. The more people we hear from the better chance we will have at bringing money to the harbor craft sector. Applications are due by April 24, 2015.

Thanks,

Beth Carper
Air Resource Specialist
Puget Sound Clean Air Agency
206-689-4057

Paul A. Randall-Grutter

From: Beth Carper <BethC@pscleanair.org>
Sent: Wednesday, April 08, 2015 6:58 PM
Subject: $900,000 Grant Opportunity Vessel Conversion to Natural Gas
Attachments: Natural Gas from Diesel.pdf

Greetings,

I thought I would pass along this grant opportunity announcement. The grant is for converting a vessel to natural gas. In addition to the natural gas conversions the award recipient will have to do emissions testing before and after the conversion.
Applications are due May 7 2015. See the attached document for more details.

Please keep me in the loop if you are planning on applying.

Regards,

Beth Carper
Air Resource Specialist
Puget Sound Clean Air Agency
206-689-4057

From: robert.loken@dot.gov [mailto:robert.loken@dot.gov]
Sent: Tuesday, April 7, 2015 2:42 PM
To: RibuffoS@muni.org; WalshSA@muni.org; WhittLA@muni.org; port@cityofhomer-ak.gov; Carl_Uchytil@ci.juneau.ak.us; David_Borg@ci.juneau.ak.us; stevec1@city.ketchikan.ak.us; lwhite@city.kodiak.ak.us; Bill.Willis@teckcominco.com; lstotts@nomealaska.org; jbaker@nomealaska.org; mvandongen@matsugov.us; John.Moosey@matsugov.us; gwollen@petersburgak.gov; jason@stpaulak.com; harbormaster@cityofseward.net; jhunt@cityofseward.net; stan@cityofsitka.com; pmclaughlin@ci.unalaska.ak.us; jdays@ci.unalaska.ak.us; dkinney@ci.valdez.ak.us; mbeaudion@ci.valdez.ak.us; harbormaster@whittieralaska.gov; citymanager@whittieralaska.gov; jbrown@portguam.com; carter.luke@hawaii.gov; ford.n.fuchigami@hawaii.gov; davis.k.yogi@hawaii.gov; portdave@portoflewiston.com; portinfo@portoflewiston.com; mweston@portofastoria.com; jknight@portofastoria.com; revert@portofastoria.com; dkoch@portofcoosbay.com; mcallery@portofcoosbay.com; manager@portofgaribaldi.org; mbmcarthur@nworegon.org; rick.finn@portofportland.com; sam.ruda@PortofPortland.com; bill.wyatt@portofportland.com; curtis.robinhold@portofportland.com; trapp@portsh.org; miranda@portsh.org; gnelson@portgrays.org; lbarnes@portgrays.org; hyde@portofanacortes.com; johnson@portofanacortes.com; ben@portofanacortes.com; robf@portofbellingham.com; dans@portofbellingham.com; sylviag@portofbellingham.com; keller@portofbenton.com; dhoward@portofbenton.com; lesr@portofeverett.com; johnk@portofeverett.com; markwilson@portofkalama.com; lnewman@portofkalama.com; gekalhagen@portoflongview.com; nkrehbiel@portoflongview.com; ahelenberg@portoflongview.com; mtcport@centurytel.net; errin.walker@makah.com; edg@portolympia.com; jessieb@portolympia.com; kathleenw@portolympia.com; keno@portofpa.com; kareng@portofpa.com; Beckett, Kurt - Port of Seattle; styrk.l@portseattle.org; osborne.b@portseattle.org; fick.t@portseattle.org; Collins, Julie; Esterbrook, Don; Wolfe, John; Eagan, Sean; tcoleman@portvanusa.com; asmith@portvanusa.com; twagner@portvanusa.com; mcfarland.r@portseattle.org; michael.lukshin@alaska.gov; eric.taylor@alaska.gov; john.falvey@alaska.gov; matthew.l.garrett@odot.state.or.us; dave.harlan@state.or.us; ivanovb@wsdot.wa.gov; lynnp@wsdot.gov; lisa@pacificports.org; brian@pacificports.org; ericj@washingtonports.org; geagle@washingtonports.org; kristin.meira@pnwa.net; heather.stebbings@pnwa.net; garynorth@gmail.com; jberger@edc-seaking.org; nwmta@comcast.net; john@portofanacortes.com; dlacosta@portguam.com; dpharris@portguam.com; anikkhoo@horizonlines.com; sardussi@psrc.org; dave.konz@tidewater.com; IMCEAFAX-

Charlie+20Costanzo+40+2B1+20+28866+29+20954-8481@dot.gov; celee@matson.com; edpage@mxak.org; eric.holdeman@pnwer.org; frank.foti@vigorindustrial.com; IMCEAFAX-Iain+20Wood+40+2B1+20+28808+29+20848-6279@dot.gov; jeveentjer@marexps.com; kristin.meira@pnwa.net; KPark@matson.com; lisa@pacificports.org; lowery@totemocean.com; mbmcarthur@nworegon.org; rene.doiron@vigorindustrial.com
Subject: $900,000 Grant Opportunity Vessel Conversion to Natural Gas

Dear Colleagues,

MARAD Environmental Office has a grant opportunity available for a vessel conversion from diesel to natural gas. Info is attached and the link to the grant in grants.gov is:
http://www.grants.gov/view-opportunity.html?oppId=275685

Please pass on to those who may be interested.

Thanks,
Bob

CAPT Robert Loken
Maritime Administration
Director PNW, AK, GU, and HI Gateways
Jackson Federal Building
915 Second Ave, Room 2608
Seattle, WA 98174
206-200-5744 (cell)
robert.loken@dot.gov

Port of Tacoma People. Partnership. Performance.

All e-mail communications with the Port of Tacoma are subject to disclosure under the Public Records Act and should be presumed to be public.

DTMA91R1500009
Natural Gas Pilot Demonstration Project
Department of Transportation
Maritime Administration

GENERAL INFORMATION

Document Type:	Grants Notice
Funding Opportunity Number:	DTMA91R1500009
Funding Opportunity Title:	Natural Gas Pilot Demonstration Project
Opportunity Category:	Discretionary
Funding Instrument Type:	Cooperative Agreement
Category of Funding Activity:	Science and Technology and other Research and Development
Category Explanation:	
Expected Number of Awards:	1
CFDA Number(s):	20.817 -- Air Emissons and Energy Initiative
Cost Sharing or Matching Requirement:	Yes
Posted Date:	Apr 7, 2015
Creation Date:	Apr 7, 2015
Original Closing Date for Applications:	May 7, 2015
Current Closing Date for Applications:	May 7, 2015
Archive Date:	Jun 6, 2015
Estimated Total Program Funding:	$900,000
Award Ceiling:	$900,000
Award Floor:	$900,000

ELIGIBILITY

Eligible Applicants:	Others (see text field entitled "Additional Information on Eligibility" for clarification)
Additional Information on Eligibility:	Elgible applicants include vessel owners, operators or public sponsors

ADDITIONAL INFORMATION

Agency Name: Maritime Administration

Description: Maritime Administration Natural Gas Pilot/Demonstration Project Request for Proposals Action: The Maritime Administration Office of Environment is issuing this request for proposals (RFP) for projects that focus on vessel conversion to natural gas in an effort to measure in situ change in criteria pollutant emissions and greenhouse gas emissions before and after the conversion. Background: Over the past several years, the Maritime Administration (MARAD) has been partnering with other government agencies, industry, and academia on efforts to reduce vessel and port air emissions and greenhouse gases as well as support the use of alternative fuels and energy sources. Several MARAD efforts are underway to address emissions reductions, specifically through development of planning and modeling tools and in situ testing of alternative fuels, repowers, and emissions reduction and energy efficiency technology. MARAD recognizes the limited Federal funding opportunities specific to the maritime sector for projects in these areas and proposes to enter into an incentive cooperative agreement to help offset costs. The total amount of funding under the RFP will be $900,000. Eligibility: MARAD is seeking to provide cost share funding through cooperative agreements for US-flagged vessels that operate on inland, coastal waterways, or the Great Lakes. Eligible applicants include vessel owners, operators, or sponsors. Awardees will be expected to complete a natural gas conversion on an existing vessel and measure/document pre- and post-conversion emissions and other operational characteristics via in situ testing methods. Data and information collected must be made available to MARAD and can be used publicly. MARAD intends to use the results/data of the demonstration projects to support further work related to air emissions reduction/alternative fuels research and to assess the public benefit of possible incentives to encourage adoption of emissions reduction and alternative fuels in the marine sector. MARAD will not fund more than 50% of the total cost of the project. Successful proposals must include a detailed description of the project that provides: • Project plan that lays out the milestones for conversion and testing. • Plan and procedures for conducting emissions testing. • Vessel class, engine type, and size. • Operation specifics and area (including ports serviced, waterway used, frequency of operation, cargo carried). • LNG supplier and location from which LNG will be secured. • The identity of project partners and their role within the project. • Identification of natural gas infrastructure and supply to support refueling needs. • Detailed cost share analysis. Proposals will be evaluated based on the following criteria: • Amount of time necessary to complete the conversion (preference may be given to conversions that can be completed within approximately 12 months of the time of award). • Amount of time necessary to complete emissions testing (emissions testing must be completed within 12 months after the conversion, and the agreement completed and payments made before September 30, 2018). • Extent and commitment of partnerships and use of partnering resources. • Ability to cost share. • Extent of annual vessel operation (e.g. MARAD is ideally seeking conversion of a commercial vessel that operates at least 3000 hours annually). • Level of detail of the plan and procedures for emission testing process including identification of the organization that will be used to complete the task. • Identification of infrastructure to serve as a refueling source. NOTE: Proposals are limited to 15 pages maximum (including any appendices/attachments). Any proposal that exceeds this requirement will not be considered. Any proposal that does not clearly address the evaluation criteria will not be considered.

Link to Additional Information:

Contact Information:

If you have difficulty accessing the full announcement electronically, please contact:

Judy Bowers Contracting Officer Phone 202-366-1913
DOT-Maritime Administration

GRANTS.GOV℠
FIND. APPLY. SUCCEED.

Paul A. Randall-Grutter

From: Rachel Rowe
Sent: Wednesday, December 13, 2017 2:57 PM
To: Paul A. Randall-Grutter
Cc: Forrest Jones
Subject: FW: R&D/D Grant Status for Art Anderson Assoc. and/or Skagit County

Not sure if this is helpful. But this was an email from the Department of Commerce denying us eligibility for the Clean Energy Fund 2.

Captain Rachel Rowe
Ferry Operations Division Manager
Skagit County Public Works
Anacortes Terminal - 500 I Ave. Anacortes, WA 98221
Ferry Office: (360) 293-6433 Cell: (360) 333-1496
Direct Line: (360) 416-1466 Fax: (360) 293-1899
rrowe@co.skagit.wa.us
www.skagitcounty.net/ferry

FERRY UPDATES:
Subscribe to our ferry email list and stay in the loop on ferry news.
Go to - skagitcounty.net/email
Select - "Guemes Island Ferry Information"

From: Rachel Rowe
Sent: Thursday, February 18, 2016 5:09 PM
To: Eric Engelbrecht (eengelbrecht@artanderson.com); Ben Anderson
Cc: Sheila Daut; Kelley Marriott
Subject: FW: R&D/D Grant Status for Art Anderson Assoc. and/or Skagit County

Eric,

In light of this determination, and it probably goes without saying, I would like to stop all efforts on Task 2 for Contract C20151646. Have you billed any hours to this task so far? If so, it shouldn't be much, but please send a detailed invoice for our review.

Thanks,

Captain Rachel Rowe
Ferry Operations Division Manager
Skagit County Public Works
Anacortes Terminal - 500 I Ave. Anacortes, WA 98221
Ferry Office: (360) 293-6433 Cell: (360) 333-1496
Direct Line: (360) 416-1466 Fax: (360) 293-1899
rrowe@co.skagit.wa.us
www.skagitcounty.net/ferry

From: Miller-Crowley, Patti (COM) [mailto:patti.miller-crowley@commerce.wa.gov]
Sent: Tuesday, February 16, 2016 1:38 PM
To: Rachel Rowe; 'Eric Engelbrecht'; Ben Anderson; Melissa Anderson

Cc: Young, Brian (COM)
Subject: RE: R&D/D Grant Status for Art Anderson Assoc. and/or Skagit County

Rachel-

We discussed the Electric Ferry eligibility determination submittals of Art Anderson Associates & Skagit County at our meeting this morning. Unfortunately simply stating that you intend to solicit and procure the R&D/D expertise is not sufficient. There are other options that you could use to apply in future rounds. These include partnering with a research institution or issuing a solicitation to pre-select a specific business having suitable R&D/D experience contingent upon receiving R&D/D funding. Further, federal funding sources do often allow you to specify business partners in advance for project implementation. Per your request below, therefore, I will deny Skagit County eligibility. Given your solicitation/procurement requirements, does Art Anderson still intend to proceed with their application?

Patti

360.725.3122

Patti

360.725.3122

From: Rachel Rowe [mailto:rrowe@co.skagit.wa.us]
Sent: Friday, February 12, 2016 6:24 PM
To: Miller-Crowley, Patti (COM); 'Eric Engelbrecht'
Cc: Young, Brian (COM)
Subject: RE: R&D/D Grant Status for Art Anderson Assoc. and/or Skagit County

Patty,

Thank you for your response to Eric. I completely understand that you cannot accept applications for the same project by more than one applicant. I also understand that if a company cannot show R&D/D expertise themselves that they will need to establish a team with whom they have partnered that can demonstrate this expertise. As per our discussion earlier this week, Skagit County does not have R&D/D expertise ourselves; we also cannot partner with any one vendor at this point because of our solicitation/procurement requirements. We would not be able to assemble a team until we went through a competitive RFP or Call for Bids process.

I appreciate the time you have taken to review our eligibility determination, ask the appropriate questions and provide guidance as to the intent of the fund. At this time, I would like to request that if the appropriate thing to do here is deny Skagit County eligibility, that you do so rather than request that we withdraw our request for eligibility. That would be greatly appreciated since the story that we tell from here needs to indicate Skagit County's commitment to this project.

Sincerely,

Captain Rachel Rowe
Ferry Operations Division Manager
Skagit County Public Works
Anacortes Terminal - 500 I Ave. Anacortes, WA 98221
Ferry Office: (360) 293-6433 Cell: (360) 333-1496
Direct Line: (360) 416-1466 Fax: (360) 293-1899
rrowe@co.skagit.wa.us

www.skagitcounty.net/ferry

From: Miller-Crowley, Patti (COM) [mailto:patti.miller-crowley@commerce.wa.gov]
Sent: Friday, February 12, 2016 4:47 PM
To: 'Eric Engelbrecht'
Cc: Young, Brian (COM); Rachel Rowe
Subject: RE: R&D/D Grant Status for Art Anderson Assoc. and/or Skagit County

Eric-

I'm sorry but Monday is a holiday so I won't be able to do that. What I can say for sure at this time is that we will not accept applications for the same project from more than one applicant.

Please note this funding is specific to research& development and demonstration. To that end, whoever applies will need to either show that they have R&D/D expertise themselves or that they are partnering or have established a team that can demonstrate this expertise through patents, licenses, detailed R&D/D experience in resumes, etc.

Patti

From: Eric Engelbrecht [mailto:eengelbrecht@artanderson.com]
Sent: Friday, February 12, 2016 3:55 PM
To: Miller-Crowley, Patti (COM)

Cc: Young, Brian (COM); Rachel Rowe
Subject: RE: R&D/D Grant Status for Art Anderson Assoc. and/or Skagit County

Hi Patti,

I spoke with Brian a moment ago and he's trying to get in touch with you to discuss.

This will leave us with very little time to develop the proposal...if Skagit is not approved Art Anderson Associates will have to effectively rewrite its proposal.

Is it possible to provide direction by Monday?

Best,
Eric

Eric Engelbrecht | Vice President - Marine Division
Office 360.479.5600 x2268 | Mobile 206.605.5489
www.artanderson.com | 202 Pacific Avenue Bremerton, WA 98337

ART ANDERSON ASSOCIATES
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From: Miller-Crowley, Patti (COM) [mailto:patti.miller-crowley@commerce.wa.gov]
Sent: Friday, February 12, 2016 3:40 PM
To: Eric Engelbrecht
Subject: RE: R&D/D Grant Status for Art Anderson Assoc. and/or Skagit County

Eric

Two of the CEF2 group (including Division Director) have been in WA DC all week so we will not discuss until our meeting next Tuesday. I plan to call both you and Skagit County following discussion re: outcome.

Patti

From: Eric Engelbrecht [mailto:eengelbrecht@artanderson.com]
Sent: Friday, February 12, 2016 3:23 PM
To: Miller-Crowley, Patti (COM)
Cc: Melissa Anderson; Rachel Rowe
Subject: R&D/D Grant Status for Art Anderson Assoc. and/or Skagit County
Importance: High

Hello Patti,

Just following up on our conversation from earlier in the week...any determination made?

Are you able to provide guidance or feedback?

Art Anderson Assoc. or Skagit County needs to know which direction to proceed with the application. Is Skagit County qualified?

We appreciate your time and consideration.

Best,
Eric

Eric Engelbrecht | Vice President - Marine Division
Office 360.479.5600 x2268 | Mobile 206.605.5489
www.artanderson.com | 202 Pacific Avenue Bremerton, WA 98337

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Paul A. Randall-Grutter

From: ForrestJones
Sent: Tuesday, August 04, 2015 3:28 PM
To: 'Annette.lee@dot.gov'
Cc: Rachel Rowe; Murphy, Kevin (kevinm@scog.net)
Subject: Section 5037 Passenger Ferry Grant

Hi Annette,

Thank you for your help in this matter concerning the eligibility of Skagit County Public Works in applying for the Section 5307 Urbanized Area Formula Grants; Passenger Ferry Grant Program.

As I mentioned on the phone, The Guemes Island Ferry is located within the city limits of Anacortes and runs across the Guemes Channel to Guemes Island (Skagit County Jurisdiction). The ferry is owned and operated by Skagit County Public Works. I believe that Anacortes is within the Metropolitan Planning Organization (MPO), however Guemes Island would not be.

I have provided a link on Google Maps to give you an idea of area where the Guemes Ferry runs. As stated above, the run is across the channel from Anacortes over to Guemes Island. If you need further information, please do not hesitate to contact me.

https://www.google.com/maps/@48.5310739,-122.6424352,20376m/data=!3m1!1e3

This link is to the County website ferry page if you would like to see additional information. http://www.skagitcounty.net/Departments/PublicWorksFerry/main.htm

Again, thank you and look forward to hearing from you soon.

Forrest Jones / Skagit County Public Works
1800 Continental Place Mount Vernon, WA 98273
Transportation Programs Manager / Lead Bridge Inspector
W: 360-416-1422 / Cell: 360-708-8627

Paul A. Randall-Grutter

From: Annette.Lee@dot.gov
Sent: Thursday, August 13, 2015 2:39 PM
To: ForrestJones; KevinM@scog.net
Cc: Rachel Rowe
Subject: RE: Section 5037 Passenger Ferry Grant

Hi Forrest,

After vetting this question thoroughly within FTA, it was determined that Skagit County Public Works is *not* eligible to apply for the Section 5307 Passenger Ferry grant program because Skagit County Public Works is not an eligible Section 5307 direct recipient.

This determination was derived because neither the origin or the destination are within the Urbanized Area. The designation as "urban" by the State is not determinative. FTA goes by the designations of the Census Bureau and population totals in our eligibility requirements, and the County does not receive 5307 funds from either FTA directly or WSDOT as a subrecipient.

Please let me know if you have additional questions.

Thank you, Annette

From: ForrestJones [mailto:forrestj@co.skagit.wa.us]
Sent: Thursday, August 13, 2015 2:21 PM
To: Lee, Annette (FTA); KevinM@scog.net
Cc: Rachel Rowe
Subject: RE: Section 5037 Passenger Ferry Grant

Hi Annette,

Was wondering if you have had a chance to look into whether or not Skagit County Public Works is eligible for this grant.

Forrest

From: Annette.Lee@dot.gov [mailto:Annette.Lee@dot.gov]
Sent: Tuesday, August 04, 2015 3:50 PM
To: KevinM@scog.net; ForrestJones
Cc: Rachel Rowe
Subject: RE: Section 5037 Passenger Ferry Grant

Thank you Kevin,

I was just trying to figure this out! I have to do some checking before coming back with an answer. I will let you all know. Thanks, Annette

Annette Lee
Grants Team Lead
FTA Region 10
91S 2nd AVE STE 3142

Seattle, WA 98174
(206) 220-4461 phone
(206) 220-7959 fax

From: Kevin Murphy [mailto:KevinM@scog.net]
Sent: Tuesday, August 04, 2015 3:46 PM
To: ForrestJones; Lee, Annette (FTA)
Cc: Rachel Rowe
Subject: RE: Section 5037 Passenger Ferry Grant

All of Skagit County is the Metropolitan Planning Area (MPA), which is the MPO planning area.. Anacortes and Guemes Island are **not** within an **Urbanized Area**. Anacortes is classified as a **Urban Area**. Guemes Island is not in an Urban Area.

Hope that helps clarify the federal geographic definitions.

Thanks

Kevin

NOTICE OF PUBLIC DISCLOSURE: This email account is public domain. Any correspondence to or from this email account *may* be a public record. As such, this email, in whole or in part, may be subject to disclosure pursuant to RCW 42.56, regardless of any claim of confidentiality or privilege asserted by an external party.

From: ForrestJones [mailto:forrestj@co.skagit.wa.us]
Sent: Tuesday, August 04, 2015 3:28 PM
To: 'Annette.lee@dot.gov'
Cc: Rachel Rowe; Kevin Murphy
Subject: Section 5037 Passenger Ferry Grant

Hi Annette,

Thank you for your help in this matter concerning the eligibility of Skagit County Public Works in applying for the Section 5307 Urbanized Area Formula Grants; Passenger Ferry Grant Program.

As I mentioned on the phone, The Guemes Island Ferry is located within the city limits of Anacortes and runs across the Guemes Channel to Guemes Island (Skagit County Jurisdiction). The ferry is owned and operated by Skagit County Public Works. I believe that Anacortes is within the Metropolitan Planning Organization (MPO), however Guemes Island would not be.

I have provided a link on Google Maps to give you an idea of area where the Guemes Ferry runs. As stated above, the run is across the channel from Anacortes over to Guemes Island. If you need further information, please do not hesitate to contact me.

https://www.google.com/maps/@48.5310739,-122.6424352,20376m/data=!3m1!1e3

This link is to the County website ferry page if you would like to see additional information. http://www.skagitcounty.net/Departments/PublicWorksFerry/main.htm

Again, thank you and look forward to hearing from you soon.

Forrest Jones / Skagit County Public Works
1800 Continental Place Mount Vernon, WA 98273
Transportation Programs Manager / Lead Bridge Inspector
W: 360-416-1422 / Cell: 360-708-8627

2017 Legislative Session
Member Requested Local Community Project Information Form

Project Name: Guemes Ferry Replacement

Address of Project Site: 500 "I" Avenue
Anacortes, WA 98221

Project Contact:

Name(s): Rachel Rowe

Title: Ferry Operations Division Manager

Organization: Skagit County Public Works

Organization's Website: https://www.skagitcounty.net/Departments/PublicWorksFerry/main.htm

Phone: 360-416-1466

E-Mail: rrowe@co.skagit.wa.us

Mailing Address: 1800 Continental Place
Mount Vernon, WA 98273

Where is the Project Physically Located?

District: 40

Latitude: 48.51844

Longitude: -122.62356
http://www.mapcoordinates.net/en

Legislative Sponsor/s:
Rep. Jeff Morris

Funding Requested: $ 515,000
Do not directly enter the Funding Requested amount on the line above. Instead, enter the relevant amounts under "Requested Dollar Amount" on page 2. The total Funding Requested will automatically be calculated and filled in on the line above.

Organization Information

	Yes	No
Is the requesting organization registered with the state as a non-profit organization?	○	●
Is there a current or pending 501(c)(3) IRS registration?	○	●
If answered **no** to either of the above, is applicant a local government?	○	○

Important Notes:
This is not a formal grant program. This form provides information for House members to request a separate appropriation in the capital budget for this project. Funding any project is at the discretion of the Legislature. Successful past projects generally are ones in which the requested state funds: (1) are used for a facility providing an important public benefit; (2) are a small portion of the total project funding (25% or less); (3) result in a completed project or phase usable by the public for the intended purpose when the state funds are expended; and (4) are for a project that is ready for construction or renovation and will be completed within the biennium.

Funds are available on a reimbursement basis only and cannot be advanced.

Projects may be subject to state prevailing wage law (Chapter 39.12 RCW). Requesting organization are encouraged to consult the Industrial Statistician (David Soma: 360-902-5330 or somd235@lni.wa.gov) at the Washington State Department of Labor Industries to determine whether prevailing wages must be paid.

High-performance building requirements (Chapter 39.35D RCW and Chapter 28A.150.510 RCW) and Executive Order 13-03 regarding life cycle and operating costs in public works projects may also apply.

NOTE: This form is prepared for the use of the Capital Budget Chair, Representative Tharinger. He may elect to submit this form for filing in the Capital Budget Committee records. In addition, if the proposed request is funded in the enacted capital budget bill, the form may be filed with the state agency that distributes funding for the project. If so filed, this form will become a legislative record subject to public disclosure and will be archived consistent with Chapter 40.14 RCW.

Project Information (attach separate page with additional details if available):
Please Note: Questions 1, 5, 6, 7, 8, 12, 13, 14, 15, and 16 require narrative responses and provide a limited amount of space for the answers. Please be as brief as possible, but if you should need additional space for any answers, please continue your responses in a separate attachment, with the question number or numbers clearly identified.

(1) Describe the entire project ***and*** the phase of the overall project for which funds are requested:

The project would potentially replace Skagit County's 37-year old, diesel-powered, vehicle and passenger ferry with a newly constructed, zero-emissions, all-electric ferry. Currently, no ferry operation in the U.S. operates an all-electric vehicle ferry; however, the technology has been proven in Norway.
Skagit County has completed a propulsion study, which concludes that all-electric technology is feasible for the Guemes Island Ferry route. Funds are requested for the design of the new vessel, which consists of two phases. Design phase one is a Design Study Report (DSR) to develop and refine various alternatives to accomplish the project. The DSR will address ridership demand/capacity, design/construction concerns, classification and certification, estimated construction cost, estimated cost of operations/maintenance, accessibility requirements, environmental impacts, shore-side renovations and charging stations. The DSR will conclude with a recommended preliminary vessel design. Estimated completion date for design phase one is 31 December 2017.
Design phase two of the project will be to use the parameters from the DSR to produce Plans, Specifications and Estimates (PS&E) suitable for competitive bids and a contract for construction. It is estimated that design phase two will be complete no later than 31 December 2018.

(2) What is the primary objective of this project? – Check only one.

- ○ Economic Development
- ○ Social Services
- ○ Education
- ◉ Infrastructure
- ○ Health Care
- ○ Historic Facilities
- ○ Parks & Recreation
- ○ Arts & Culture
- ○ Environment
- ○ Housing
- ○ Other (describe) _____

(3) Start and Completion Dates: 01 Apr. 2017 to 31 Dec. 2018

(4) Eligible Project Type or Phase (Check all that apply to this funding request and insert requested amount).

		Requested Dollar Amount
☐	Land Acquisition	
☐	Demolition and Site Preparation	
■	Design	$ 500,000
☐	New Construction	
☐	Renovation	
☐	Other (describe) _____	
	Commerce Administrative Fee (3%, up to $50,000 maximum) ***Note: This is a mandatory fee.**	$ 15,000
	Total Request	$ 515,000

■ **Attachments: (Please enclose any materials that further describe the project and its financing.)**

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(5) Public benefits of the project:

This project directly benefits Washington state residents, taxpayers, the local community and all stakeholders. Development of an all-electric ferry demonstrates that Skagit County and Washington State are technology leaders willing to invest in safe, environmentally conscious, clean energy projects that benefit both the local community and the global environment. This very important project will reduce harmful greenhouse gas emissions, increase energy independence, and significantly reduce operating expenditures (OPEX).

(6) How does this project help the State meet its greenhouse gas emission reduction goals in Chapter 70.235 RCW?

The current Guemes Island Ferry is powered by diesel engines that burn approximately 52,000 gallons of diesel fuel per year. Alternatively, an all-electric replacement vessel would be powered primarily by batteries capable of being re-charged at the pier. The project would reduce harmful emissions of carbon dioxide by nearly 62,000kg and demonstrate clean energy technology that would stimulate Washington's economy.

(7) Will this project have a revenue-generating component that would have community and state economic benefit? Please describe and quantify.

Washington State is home to many reputable naval architecture firms and ship builders. Once the technology is demonstrated here in Skagit County, all-electric technology could be expanded to other vessels and projects which will further opportunities, and increase competitiveness, for Washington-based businesses.

(8) Please quantify any short- and long-term job creation that will result from this project.

A report generated by the U.S. Treasury Department in 2012 titled, "A New Economic Analysis of Infrastructure Investment" found that spending on infrastructure, including ship-building, generates demand for products and services from a variety of industries. Facilitating the creation of clean energy in the commercial marine industry, particularly all-electric vessel propulsion, could result in jobs in energy storage/development/solutions, naval architecture/marine engineering, electric motor manufacturing and ship building/construction.
Data from the Department's Bureau of Economic Analysis and the Bureau of Labor Statistics suggest that 61 percent of the jobs created by investing in infrastructure would be in the construction sector.

	Yes	No
(9) Is this a joint project?	○	◉
If **yes**, has a joint operating agreement been signed?	○	○
(10) Is the site ☒ owned, ☐ optioned for purchase or ☐ under a lease?		
Does the applicant understand and agree that any and all real property owned, optioned for purchase, or under a lease, that is acquired, constructed, or otherwise improved using state funds approved by the Legislature must be held and used for the purposes stated in this application for at least ten years from the date of the final payment made for the project?	◉	○
(11) Has the applicant initiated a capital fundraising campaign?	○	◉

If **yes**, what percent of matching funds have been secured? _____%

(12) What other sources of matching funds are being pursued?

Skagit County Road Fund, Skagit County General Fund, Bonds, Low Interest Loans or Financing Programs, Fare Box Revenue Surcharge, and/or Local Ferry District.

NOTE: This form is prepared for the use of the Capital Budget Chair, Representative Tharinger. He may elect to submit this form for filing in the Capital Budget Committee records. In addition, if the proposed request is funded in the enacted capital budget bill, the form may be filed with the state agency that distributes funding for the project. If so filed, this form will become a legislative record subject to public disclosure and will be archived consistent with Chapter 40.14 RCW.

(13) Please list all past and current efforts to obtain **state** funding for this project, including year, state agency, specific fund source, and whether or not funding was obtained.

February, 2016: WA State Dept. of Commerce - Clean Energy Fund 2; Skagit County was denied eligibility.
Spring, 2017 County Road Administration Board, County Ferry Capital Improvement Program - In process.
Spring, 2017 Public Works Trust Fund - In process.

(14) If the project will not be completed after the requested state funding and matching funds are used, describe: (1) what the project will be at the completion of the portion funded by this request and how it will benefit the public; and (2) the phases and schedule for completion of the project.

1)Design Phase One - Design Study Report (DSR); estimated completion no later than 31 December 2017. This request would fund the DSR which will allow Skagit County to more aggressively seek grant funding for final design and construction. Grant funding will significantly reduce financial burden to the County and taxpayers.
2)Design Phase Two - PS&E & Call for Bids for Construction; estimated completion no later than 31 December 2018. Any remaining funds (after DSR completion) from this request will be used for design phase two.
3)Construction Phase - Estimated completion date 31 December 2019.

(15) What source(s) of non-state funds exist for completion of the project and its ongoing maintenance and operation?

Non-State Funding Mechanisms for the capital project could include, but may not be limited to: the Maritime Administration (MARAD) Marine Technical Assistance (META) Program, MARAD Federal Ship Financing Program, Federal Highway Administration (FHWA) Ferry Boat Program (FBP), Puget Sound Clean Air Agency maritime grants, Environmental Protection Agency (EPA) Diesel Emissions Reduction Act (DERA) Program, Transportation Investment Generating Economic Recovery (TIGER) Program, Build America Transportation Investment Center credit programs/low interest loans. Ongoing OPEX would presumably be funded with fare box revenue, and subsidized by the County's road fund. Skagit County is not an eligible 49 U.S.C. Section 5307 direct recipient; therefore, Federal Transit Authority (FTA) funds cannot be use for OPEX.

(16) Are there any community concerns about this project (i.e. conflict with land use, neighborhood concerns, other) that would prevent it from moving forward?

Local and community support is strong; Skagit County is not currently aware of any specific concerns that would prevent the project from moving forward.

Legislative Sponsor
(Signature)_____ **Date**_____

NOTE: This form is prepared for the use of the Capital Budget Chair, Representative Tharinger. He may elect to submit this form for filing in the Capital Budget Committee records. In addition, if the proposed request is funded in the enacted capital budget bill, the form may be filed with the state agency that distributes funding for the project. If so filed, this form will become a legislative record subject to public disclosure and will be archived consistent with Chapter 40.14 RCW.

Skagit County
1800 Continental Place
Mount Vernon, WA 98273

ALL-ELECTRIC FERRY REPLACEMENT PROJECT

Investing in Clean Energy
&
The Future of Marine Transportation

The first electric car and passenger ferry in the world, Ampere, entered service in Norway, in early 2015. With three battery packs, one on board and one at each pier, it is completely free of emissions.

PROJECT TYPE: Ferry Vessel Replacement

LOCATION:

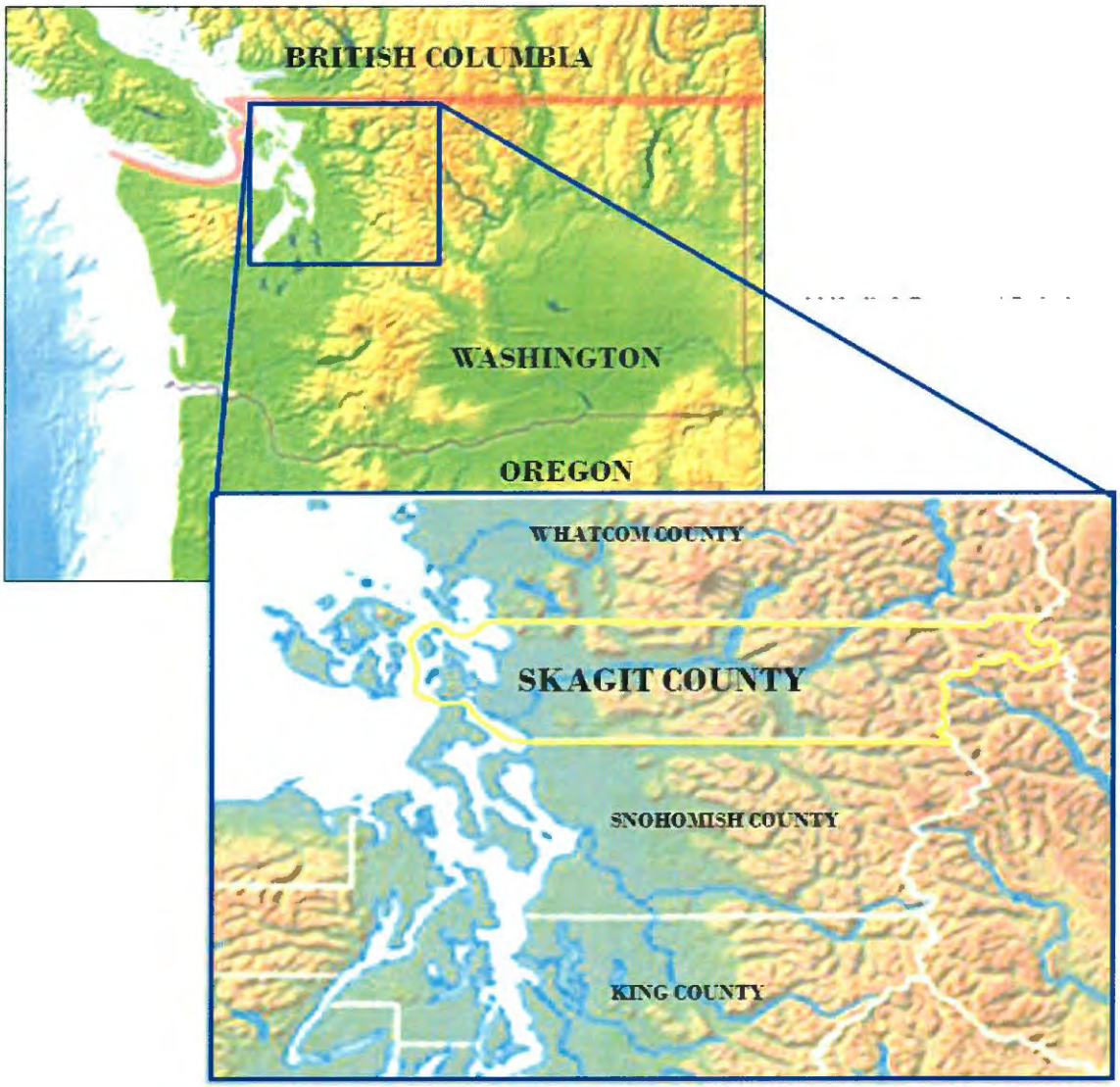
County & State: Skagit County, Washington

Legislative District: 40th District

- Sen. Kevin Ranker
- Rep. Kristine Lytton
- Rep. Jeff Morris

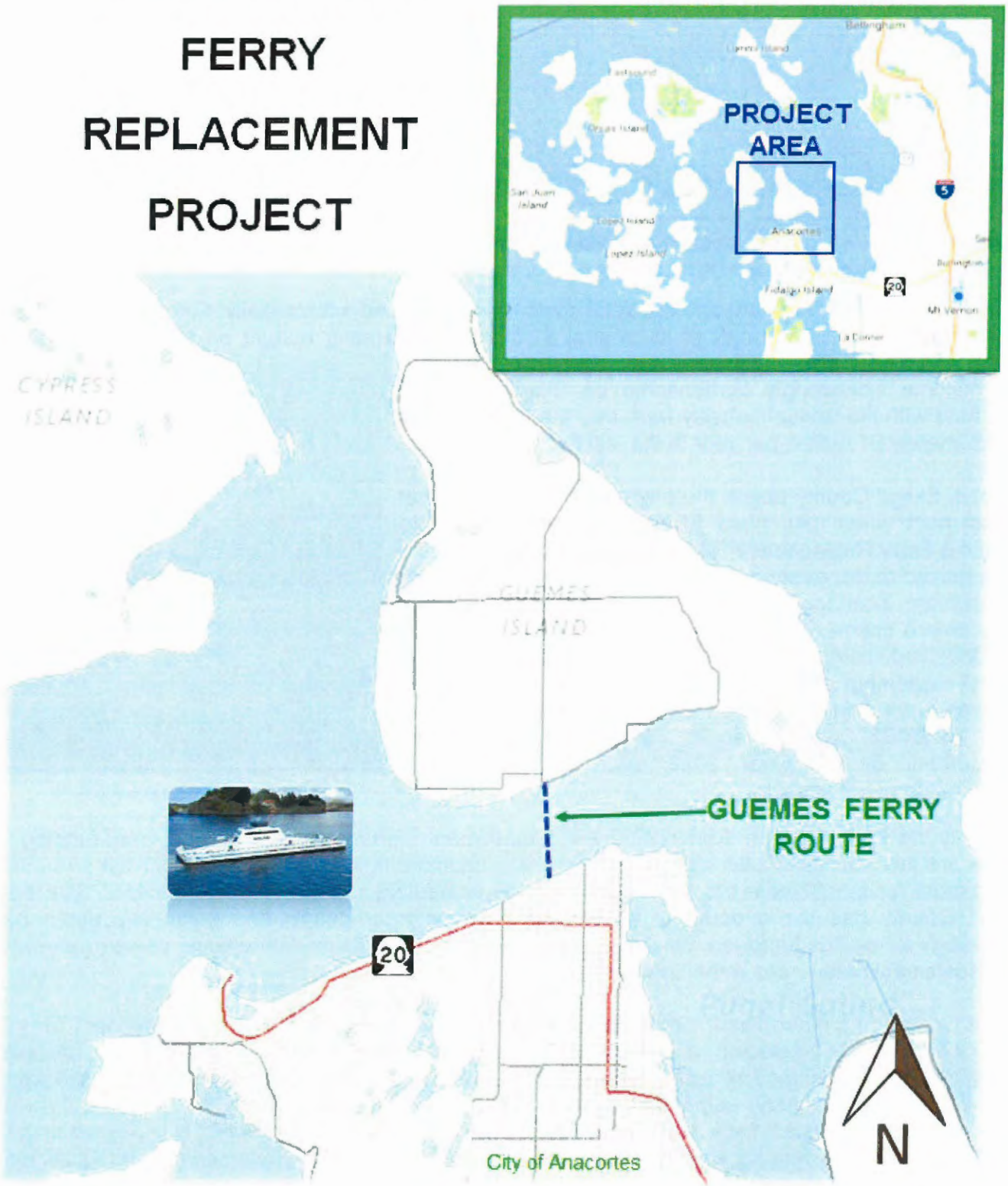
Congressional District: WA-2 (Washington State 2nd District)

- U.S. Rep. Rick Larsen
- U.S. Sen. Maria Cantwell
- U.S. Sen. Patty Murray



The Skagit County Ferry System operates between Anacortes and Guemes Island, WA. The route is approximately 5/8 mile; a round-trip crossing takes roughly 20-25 minutes.

ALL-ELECTRIC FERRY REPLACEMENT PROJECT



EXECUTIVE SUMMARY

Skagit County has operated a vehicle and passenger ferry service between Anacortes and Guemes Island, WA since the early 1960s. Only one vessel services this route. The current vessel, the M/V GUEMES, is a 21-vehicle, 99-passenger, diesel-powered ferry that was built and put into service in 1979. Today, the ferry operates 365 days a year and transports roughly 200,000 vehicles and 400,000 passengers annually.

The M/V GUEMES with Guemes Island in the background.

There are no alternative roads or highways that provide access to Guemes Island; as such, the Skagit County ferry system serves as a vital transportation link for its ridership. In addition to transporting commuters, the ferry also carries tourist traffic, construction and logging trucks, essential services trucks and emergency vehicles and personnel to and from the Island.

In the last few years, haul-out and dry dock costs have increased substantially. Since 2014, the Ferry Division has spent nearly half of its annual $2.5 million operating budget on maintenance of the vessel and associated machinery and repair projects. This has become increasingly burdensome on Skagit County's road fund with the annual subsidy from that fund contributing approximately $1 million per year in the last few years.

In 2013, Skagit County began the process of studying vessel replacement when they hired Elliott Bay Design Group to publish a Ferry Replacement Plan for the M/V GUEMES. The study looked at the existing cost of operation then formulated replacement scenarios to determine the most economic replacement option. The conclusion was that immediate or near-term replacement of the vessel will minimize the overall cost of ownership and provide environmental improvements in vessel operation. The report also recommended that The M/V GUEMES would require a major overhaul or replacement by the year 2023 due to the continual deterioration of the vessel.

The M/V Guemes in dry dock

Currently the Ferry Division does not have a replacement fund for the vessel, and grant funding for ferries are increasingly challenging to obtain. Aging equipment is becoming more difficult and costly to maintain for the 37-year old ferry. Realizing the immediate need to replace the M/V GUEMES, Skagit County has the opportunity to look 40 years into the future and potentially utilize new technology to replace imported diesel fuel as a means for propulsion with electric power, generated from sustainable resources within the state.

Skagit County has determined a need to replace its diesel-powered vehicle and passenger ferry. A newly constructed, all-electric vessel would reduce operational and maintenance costs, increase energy independence and reduce harmful CO_2 (Carbon dioxide) air emissions by 619,359 kg. A propulsion/feasibility study, completed by Art Anderson Associates in 2016, concluded, "...an all-electric propulsion system for a new concept vessel to replace the M/V GUEMES is highly feasible for this particular route and its unique environmental conditions...It is recommended that all-electric

propulsion be considered for the design of a replacement vessel that will provide safe and reliable service."

Currently, no state in the U.S. operates an all-electric vehicle ferry; however, the technology has been proven in Norway. Development of the all-electric ferry demonstrates that Skagit County and Washington State are technology leaders willing to invest in safe, environmentally conscious, clean energy projects that benefit both the local community and the global environment.

Benefits – This very important project will:

- Allow Washington State and Skagit County to become a pioneer in electric ferry technology in the United States;
- Support clean energy technology that reduces costs, saves energy, increases energy independence and reduces harmful CO_2 (Carbon dioxide) emissions by nearly 620,000 kg reducing the social cost of carbon;
- Increase the competitiveness of Washington-based businesses and facilitates the creation of new technology and jobs in marine manufacturing, marine architecture, energy storage and development, and electric motor construction;
- Provide an opportunity for Washington State to demonstrate technology that can be expanded to other vessels and projects which will further stimulate Washington's economy;
- Result in a much-needed reduction in Skagit County's annual maintenance costs; and
- Directly benefit Washington State residents, taxpayers, the local community and all stakeholders.

In the coming months, the Public Works Department will be hiring a Naval Architecture firm to complete a design study and conceptual design of the new vessel. Skagit County is planning to aggressively seek grant funding in 2017 in order to move the project into the final design phases. Skagit County has not yet received any federal or state grant funding for the project.

With limited resources and increasing infrastructure needs, Skagit County respectfully requests the State consider appropriating $500,000 in funding for preliminary design of this project. The preliminary design will assist Skagit County with applying for federal grant assistance for final design and construction of the project.

CURRENT PROJECTED FUNDING

• Federal Allocations (FBP)	$ 200,000
• Federal Grant Assistance	$ 1,125,000
FUNDING REQUESTED:	**$ 500,000**
TOTAL EST. DESIGN COST:	**$ 1,825,000**

PROJECT CONTACT INFORMATION:

Skagit County Public Works
ATTN: Captain Rachel Rowe, Ferry Operations Division Manager
1800 Continental Place
Mount Vernon, WA 98273
(360) 416-1400
rrowe@co.skagit.wa.us

SIEMENS

Pictures of the Future
The Magazine for Research and Innovation

Setting a Course for Carbon-Free Shipping

In conjunction with Fjellstrand, a Norwegian shipyard, Siemens has developed the technology for the world's first electrically-powered car ferry. The fact that the ferry, which entered service in early 2015, causes no carbon dioxide emissions is in part due to Norway's electricity mix.

As silently as a crocodile, the white giant approaches the shore. It opens its "mouth," which is several meters across. Suddenly the silence is broken by the roar of engines as a stream of trucks and people emerge from the opening. Odd Moen, an engineer who is responsible for ship solution sales at Siemens Norway, smiles. His vision of an electrically-powered ferry sailing across Norway's fjords just became a reality. Making hardly a sound and producing absolutely no emissions, it's the first and only ferry of its kind in the world.

A Century of Battery-Powered Service

"For more than 100 years, there have been battery-powered submarines that run solely on electricity," says Moen. "That got us wondering why we couldn't bring such a drive system concept to the surface, so to speak." Experts began to work on developing this idea as early as 1999, but the technology needed was still too new for the market at that point, Moen recalls. Since then, however, technologies have improved, and lifecycle assessment issues have become more important. Indeed, it was the environmental aspect of the project that won over Norway's Ministry of Transport and Communications, which oversees the country's waterways.

Ship owner Norled operates on the ferry link across Sognefjord between Lavik and Oppedal, Norway. The fully electric ferry travels six kilometers across the fjord 34 times a day, with each trip taking around 20 minutes.

Five years ago the Ministry launched a competition to develop the most environmentally friendly ferry. The Ministry announced that the winner would be awarded the concession for the ferry link between the villages of Lavik and Oppedal in the Sognefjord. Diesel-operated ships continue to serve this connection, but the concession license expires in 2015. The Ministry decided it wanted to use ships whose low noise and emissions would disturb the idyllic surroundings as little as possible.

"We got together with the Fjellstrand shipyard and the ship owner Norled and developed an old idea further," Moen explains. "We pooled our expertise – Fjellstrand's knowledge of energy-efficient shipbuilding and Siemens' electric propulsion expertise." The result is a sophisticated concept that's unparalleled anywhere in the world and unrivaled in terms of environmental compatibility. "That's what ultimately convinced the Ministry officials," says Moen.

The first electric car and passenger ferry in the world, Ampere was equipped by Siemens in cooperation with shipbuilder Fjellstrand. With three battery packs, one on board and one at each pier, it is completely free of emissions.

The cooperative effort led to the creation of a fully electric ferry that travels across the fjord 34 times per day, with each trip requiring around 20 minutes to make the six-kilometer crossing. The ferry, which is 80 meters long, is driven by two electric motors, each with an output of 450 kilowatts. Both are powered by lithium-ion batteries. The batteries have a combined capacity of 1,000 kilowatt-hours (kWh), which is enough to make a few trips between the two fjord communities. After that the batteries need to be recharged.

The ship's batteries will be recharged directly from the grid at night after the ferry stops operating.

Fjellstrand and Siemens engineers have come up with a simple idea to address the batteries' range problem. "We want to recharge the batteries at the docks after each trip," Moen explains. Still, this will give the ferry operator only ten minutes for recharging while passengers and vehicles disembark. The problem is that the power grid in the region is relatively weak, as it was designed to provide electricity only to small villages. "Briefly consuming so much energy from the medium-voltage system to recharge the ferry batteries would cause the washing machines in all the houses in the area to stop running. Obviously we can't do that to the residents here," Moen explains.

Eighty meters long and 20 meters wide, the ferry transports up to 120 cars and 360 passengers.

Battery units rated at 260-kWh supply electricity to the ferry while it waits. Afterward, the battery slowly recoups all of this energy from the grid until the ship comes back again to drop off passengers and recharge.

The fully electric ferry operates across the six kilometer long route E39, between Lavik and Oppedal, north of Bergen in Norway.

Siemens developed the electrical propulsion technology for the ferry at its R&D department in Norway.

The ferry's energy management system (EMS) is preprogrammed with curves giving engine fuel consumption under different load conditions. The EMS interfaces with sub-controllers for gensets, thrusters and remote controls to monitor and set optimal engine speed.

Green Power Mix

Siemens' experts therefore installed one lithium-ion battery at each pier to serve as a buffer. The 260-kWh unit supplies electricity to the ferry while it waits. Afterward, the battery slowly recoupes all of this energy from the grid until the ship comes back again to drop off passengers and recharge. The charging stations are housed in a small building about the size of a newsstand. The ship's batteries are recharged directly from the grid at night after the ferry stops operating. This solution is both simple and ingenious. "Under the prevailing conditions, it was the only feasible way of building and operating a battery-powered ferry," says Moen. "Otherwise we would have had to expand the entire grid, and that would not have been possible due to the high costs of such a project."

It isn't just its drive system that makes the new ferry so environmentally friendly. Its electric motors are of course virtually silent and don't burn any fossil fuels. They also don't produce any pollutants. By contrast, a conventional ferry traveling the same route consumes around one million liters of diesel fuel and emits 2,680 tons of carbon dioxide and 37 tons of nitrogen oxide each year. Nevertheless, the real reason for the positive environmental balance is the electricity mix. "The electricity in this area is generated exclusively by hydroelectric plants," says Moen. "This makes the energy the ferry uses cheaper than diesel. It also means the ship doesn't emit even one gram of carbon dioxide, directly or indirectly."

Project specialists have also adopted a new approach for the ferry's design. After all, unlike most electric cars, this ship was developed from the ground up as an electrically-powered vessel. This has had a noticeable effect on its weight in particular. Despite its ten-ton batteries and capacity for 360 passengers and 120 vehicles, the ship is only half as heavy as a conventional ferry. That's because it's made exclusively of aluminum rather than the steel normally used in shipbuilding. The ship's corrosion-resistant structure also means it doesn't require the special coat of paint that's used to protect steel ships against rust. Its robust aluminum hull needs far less maintenance, says Moen. That too lowers the ferry's operating costs. In addition, the ship's designers searched for the most energy-efficient systems available.

The fully electric ferry travels the fjord 34 times a day, with each trip taking around 20 minutes.

The ferry is made exclusively of aluminum rather than the steel normally used in shipbuilding. This makes it only half as heavy as a conventional ferry.

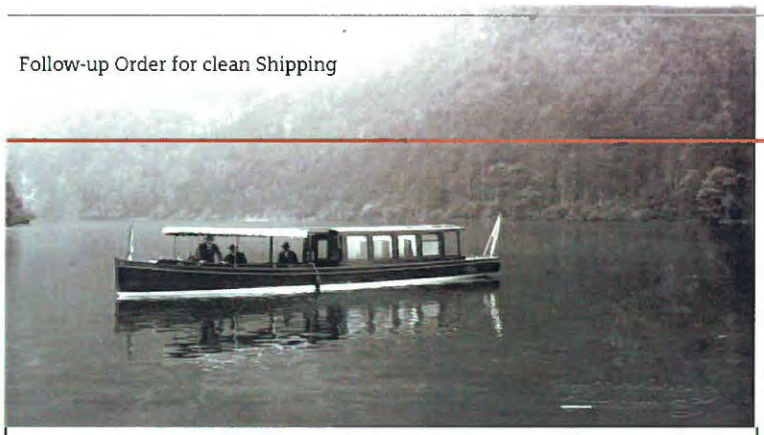
Electric Ferries could Serve 50 Routes in Norway

Moen believes the great potential offered by electric ships can already be exploited. "There are 50 routes in Norway alone where battery-powered ferries could operate profitably," he says. "And we expect that batteries will become considerably more efficient and less expensive over the next five years." He also points out that Norwegians are very enthusiastic about innovations. In this respect, Moen, who rides an electric bicycle to work three times a week and likes to go snowboarding in the winter, is no exception. Still, although he is an enthusiastic fan of progress, Moen also likes continuity. For example, he has been working at Siemens for more than 30 years. He also regularly spends time in his garage, where he restores vintage automobiles. Those vehicles, at least, are still allowed to keep their combustion engines.

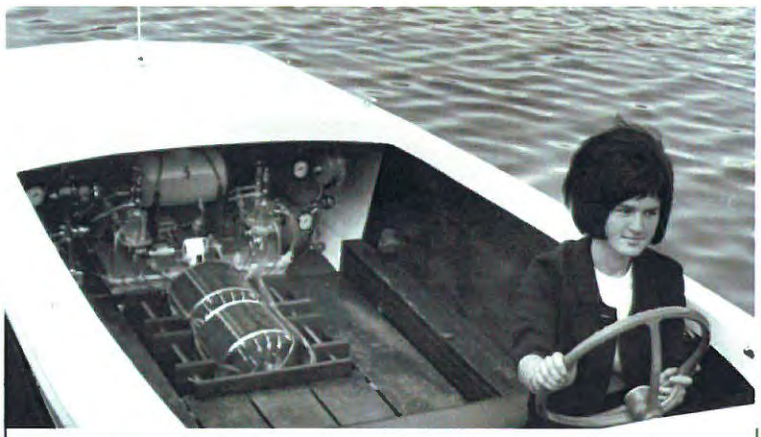
Florian Martini

Some 130 years ago on the Spree River, Berlin, Siemens tested its first electric boat, which was intended to operate as a kind of water taxi back in 1886. The Elektra could carry 25 passengers at a speed of 14 km/h.

Follow-up Order for clean Shipping



The "Akkumulator" launched electric passenger navigation on the King's Lake in Upper Bavaria 25 years later. This electric boat from Siemens held 38 people and was 12 meters long. The boat's hull and cabin were both made of mahogany. Power came from a lead-acid battery, giving the boat an operating range of 100 km.



Electric boats reached their high point in 1965, when Siemens presented Europe's first fuel cell-powered boat on a pond at its Erlangen Research Center.

17 March 2016

Mobility & Motors

Electric Mobility: Trends

Electric motors are much more efficient than combustion engines. But they won't replace today's engines until we've rethought cars, as well as the entire road and traffic infrastructure.

1 October 2014

Mobility & Motors

Hybrid Ships: Silence at Sea

Engineers are developing drive concepts for ship propulsion that are energy efficient and nearly as silent as those of submarines.

25 August 2015

Mobility & Motors

Quiet Cruising on Königssee

For more than 90 years electric motors have powered boats on Bavaria's Königssee.

31 January 2014

Economic Development Public Facility Project Application

Board of County Commissioners · 1800 Continental Place · Mount Vernon WA 98273
voice 360-416-1300 · fax 360-336-9307 · www.skagitcounty.net

Part 1 Applicant Information

Organization	Skagit County Public Works				
Address	1800 Continental Place	State	WA	Zip	98273
Primary Contact	Rachel Rowe	Phone	360.416.1466		
E-mail Address	rower@co.skagit.wa.us				

Part 2 Project Information

RCW 82.14.370 (3) defines "public facilities" as bridges, roads, domestic and industrial water facilities, sanitary sewer facilities, earth stabilization, storm sewer facilities, railroad, electricity, natural gas, buildings, structures, telecommunications infrastructure, transportation infrastructure, commercial infrastructure, and port facilities in the state of Washington.

Project Name	Guemes Ferry Replacement / Alternative Propulsoin Design	Location	Guemes Island Ferry Terminal, Anacortes WA
Project Type	Transportation Infrastructure	Start Date	3/1/2017

Description: The project would perform a design study to replace the vessel and/or review alternative propulsion systems to re-power and incorporate major upgrades to the existing 37-year old ferry.

Use of funds: Describe the specifics of what funds will be spent on (e.g., labor, equipment, material, etc.):

Design study and final design of an all-electric ferry / alternative propulsion systems, including the design for the retro-fit of the Anacortes terminal dock for a charging station if requried.

Part 3 Required Resources

Provide a budget that shows a breakdown of project costs. Please also provide a breakdown of current and proposed funding that clearly illustrates the total funding required for the project listed by individual funding source, including any money from the Public Facilities fund. Specify any conditions attached to any funding sources.

Budget	Total funding requested from Distressed/Rural County Sales and Use Tax to fund public facilities projects in Skagit County (not to exceed $500,000)		$	500,000
	Amount primary sponsor/organization is contributing to the project		$	200,000
	Other Funding Source:	State Funding Assistance - Pending	$	500,000
	Other Funding Source:	Federal Grant Assistance - Pending	$	625,000
	Other Funding Source:	Click here to enter text.	$	text
	Other Funding Source:	Click here to enter text.	$	text
	Other Funding Source:	Click here to enter text.	$	text
	Total Project Cost		$	1,825,000

Comments: Describe impact to project if not fully funded:

If not fully funded, it may delay the timeline of the project. However, staff will continue to seek funding partners to fully implement project scope.

Part 4 Growth Management

Planning

Per RCW 82.14.370(3)(a), the project must be listed as an item in the County's adopted overall economic development plan, or the economic development section of the County's comprehensive plan, or your city or town's comprehensive plan. Under which plan is the proposed project contained? (Please attach a resolution or ordinance documenting that the appropriate authority has included the project in one of the above plans.)

This project is listed in both the County's Comprehensive Plan Adopted per Ordinance O20160004 and the Six Year Transportation Improvement Plan per Resolution R20160333

Project location Incorporated Area Zoning: Marine Craft Transportation

Part 5 Value Proposition

Business

Is this project supportive of a specific business? If so, how many? Please provide names of businesses if known.

This project would help ensure the reliable movement of freight and goods to Guemes Island and back. This supports the local store and eatery on Guemes Island, the Guemes Island Resort, contract workers and home builders, consumable delivery services, and the numerous businesses in Anacortes. In additon, this funding phase will also support a study and set the design criteria of the vessel.

Jobs

Describe, in specific detail, how this project will create jobs and/or allow for the retention of current jobs.

A report generated by the U.S. Treasury Department in 2012 titled, "A New Economic Analysis of Infrastructure Investment" found that spending on infrastructure, including ship-building, generates demand for products and services from a variety of industries. Facilitating the creation of clean energy in the commercial marine industry, particularly all-electric vessel propulsion, could result in jobs in energy storage/development/solutions, naval architecture/marine engineering, electric motor manufacturing and ship building/construction.
Data from the Department's Bureau of Economic Analysis and the Bureau of Labor Statistics suggest that 61 percent of the jobs created by investing in infrastructure would be in the construction sector, 12 percent in the manufacturing sector, and 7 percent would be in retail trade.

Job Detail

Provide information on the following: (a) the average wage, including benefits, and the number of new jobs/FTEs; and (b) the average wage, including benefits, as the result of the project. Please be specific as possible. *Generic information may not be scored. Do not include any construction-related jobs.*

	Jobs/FTEs Retained	Jobs/FTEs Created 1-3 Years	Jobs/FTEs Created 4 Years
Number of Jobs/FTEs	10	16	20
Average Wage/FTE	$37.95	$41.47	$42.71

Infrastructure

How will this project improve local infrastructure capacity? How much additional capacity will be provided for future development? Please be specific in your answer.

This project will improve the current local infrastructure by replacing the existing ferry that is nearing 40 years in age. As it ages, we are continued to see escalating increases in maintenance costs to keep the ferry running and seaworthy to meet Coast Guard Standards and maritime laws. While the new vessel is not designed yet, we anticipate increased carrying capacity in number of vehicles and passenger to keep up with demand while utilizing the existing facilities to keep cost down. In addition, there will be a major reduction in maintenance that requires the vessel to be out of service.

Part 6 Project Timeline

Timeline Provide a timeline for the project. Please include specific deadlines for segments or phases of the project, including total project begin date and completion date.

Public Works has completed the necessary propulsion study in 2016 to verify that an electric propulsion system would work in the Guemes Channel. This phase of the project would include the design study and/or propulsion alternatives then a full design of the new new vessel or design an alternative propulsion and upgrade of the existing vessel. This would also include a full design of the Anacortes Terminal retro-fit. We anticipate this design phase to be completed in 2017 - 2018. The final phase of the project involves construction of the new ferry and retro-fitted terminal to accommodate an all-electric ferry or major upgrades to the existing vessel to house a new propulsion system. It is anticipated that this phase will be completed in 2019-2020.

Phasing If this is a phased project, for which phase are you applying for funding?

We are applying for the Design Phase of this project.

Completion By what date will the project (or this phase) be complete? Funds will lapse and may not be spent after this date.

We are requesting funding for the Design Study and Full Design phase of the new all-electric ferry and/or alternative propulsion system vessel upgrade which would include the Anacortes Terminal retro-fit; scheduled for completion by December, 2018. Once this phase is completed we will have a solid plan to move forward with the construction of the new vessel.

Efforts So Far Summarize efforts taken to date regarding the project. What planning has taken place? Have engineering reports and feasibility studies been prepared? If so, describe them.

Public Works has performed a propulsion study of the Guemes Channel and have been in contact with electric propulsion experts and ship builders. Public Works has vetted alternative options with the Guemes Island Ferry Committee and public meetings with the Board of Skagit County Commissioners have been held to discuss the M/V Guemes and options going into the future. Public Works is also currently pursuing additional funding through potential grant opportunities to fund the construction phase of this project.

Part 7 Action Plan

What quantifiable measures are you going to track to measure the success of the project?

We believe some of the quantifiable measures we can track include but not limited to the reduction in carbon emissions. By switching to an all-electric ferry or other alternative propulsion systems, we have the potential to eliminate up to nearly 620,000 kg of carbon into the environment. Another measureable will be the expansion of electric technology in the ship building industry. This has the potential to expand to other vessels and projects which will further opportunities and increase competitiveness for Skagit County and Washington based businesses for clean energy.

Part 8 Miscellaneous

Include information related to the project, if any, that would assist the Economic Development Advisory Committee and the Board of County Commissioners in evaluating the funding request, such as emergency declarations, bird-in-hand industry, volunteer efforts, links to other priority projects, etc.

This project directly benefits Washington state residents, taxpayers, the local community and all stakeholders. Development of an all-electric ferry and/or alternative propulsion systems, demonstrates that Skagit County and Washington State are technology leaders willing to invest in safe, environmentally conscious, clean energy projects that benefit both the local community and the global environment. This very important project will reduce harmful greenhouse gas emissions, increase energy independence, and significantly reduce operating expenditures (OPEX).

Part 9 Applicant Certification

The applicant here certifies and affirms (1) that it does not now, nor will it during the performance of any contract arising from this application, unlawfully discriminate against any employee, applicant for employment, client, customer, or other person who might benefit from said contract, by reason of age, race, color, ethnicity, sex, religion, creed, place of birth, or degree of handicap; (2) that it will abide by all relevant local, state and federal laws and regulations; and (3) that it has read and understood the provisions and restrictions in each part above and will comply with all provisions thereof.

Signature Date

Printed Name Dan Berentson Title

Skagit County
1800 Continental Place
Mount Vernon, WA 98273

ALTERNATIVE ENERGY FERRY REPLACEMENT PROJECT AND/OR VESSEL UPGRADE

Investing in Clean Energy
&
The Future of Marine Transportation

The first electric car and passenger ferry in the world, Ampere, entered service in Norway, in early 2015. With three battery packs, one on board and one at each pier, it is completely free of emissions.

PROJECT TYPE: Ferry Vessel Replacement / Alternative Propulsion

LOCATION: Skagit County, Washington

Board of County Commissioners:

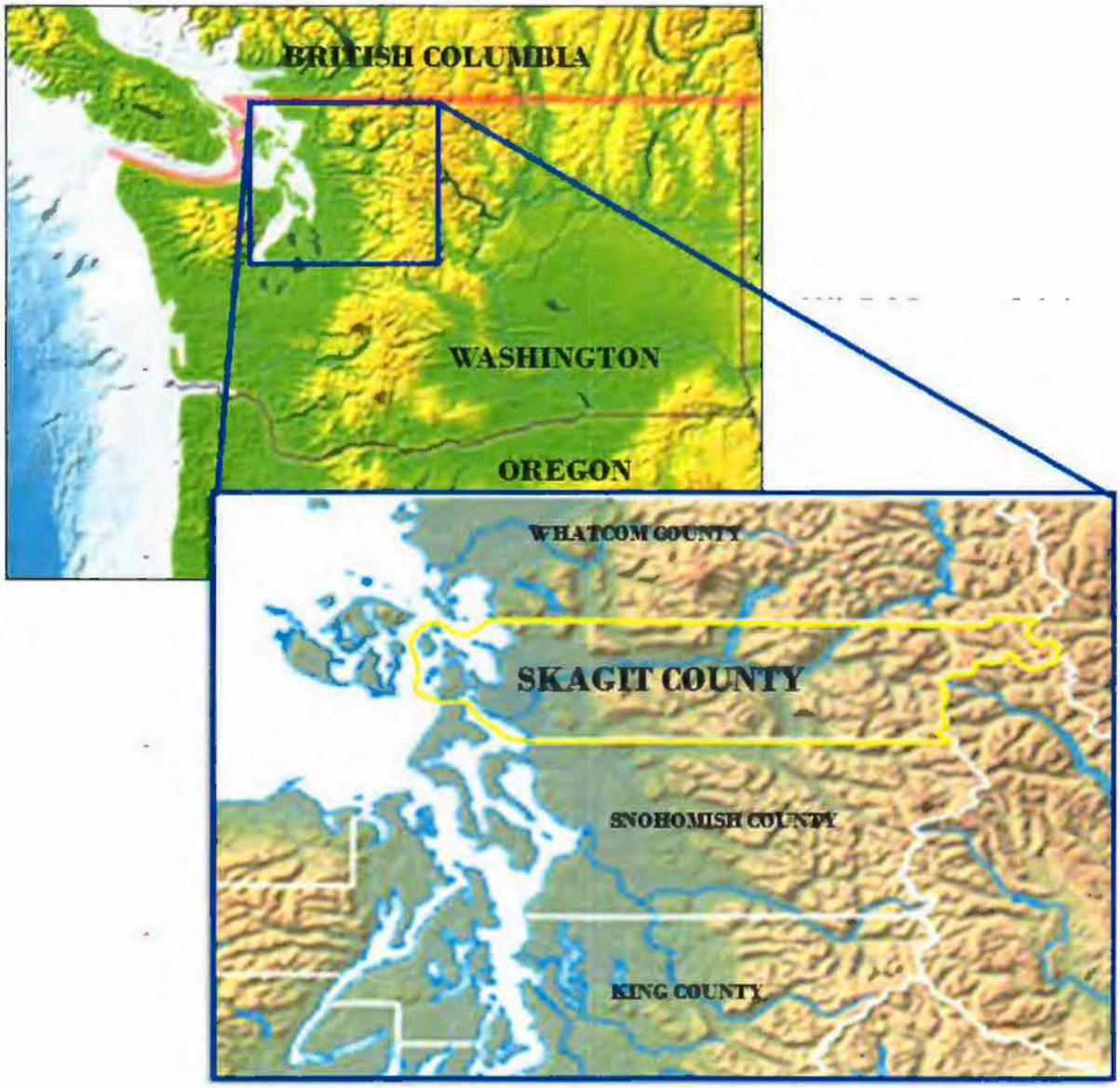
- Ron Wesen, District One
- Ken Dahlstedt, District Two
- Lisa Janicky, District Three

County & State Legislative District: Skagit County, Washington 40th District

- Sen. Kevin Ranker
- Rep. Kristine Lytton
- Rep. Jeff Morris

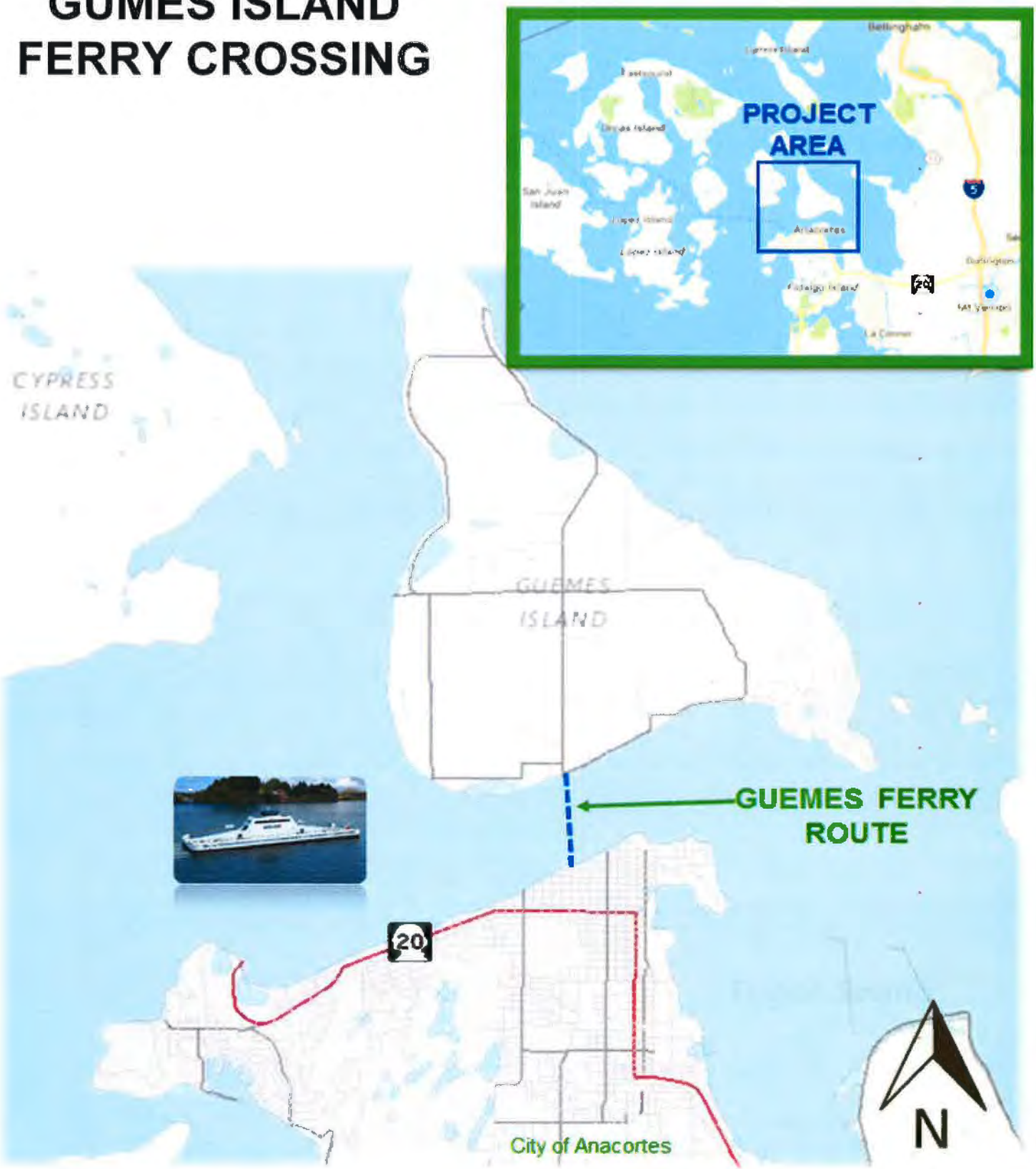
Congressional District: WA-2 (Washington State 2nd District)

- U.S. Rep. Rick Larsen
- U.S. Sen. Maria Cantwell
- U.S. Sen. Patty Murray



The Skagit County Ferry System operates between Anacortes and Guemes Island, WA. The route is approximately 5/8 mile; a round-trip crossing takes roughly 20-25 minutes.

GUMES ISLAND FERRY CROSSING



RESOLUTION NO.

**AWARDING GRANT FUNDING FOR
ECONOMIC DEVELOPMENT / PUBLIC FACILITIES PROJECTS**

WHEREAS on May 4, 1998, the Board of Skagit County Commissioners adopted Ordinance 16979 authorizing a .04% sales tax rebate from Washington State for public facility financing pursuant to Chapter 366, Laws of 1997; and

WHEREAS on May 18, 1998, the Board of Skagit County Commissioners adopted Resolution 16991, establishing the Distressed Counties Public Facilities Fund #342 to account for the sales tax revenue returned by Washington State and the expenditures thereof; and

WHEREAS on May 3, 1999, the Board of Skagit County Commissioners adopted Resolution 17426, establishing an Advisory Committee and a process for receiving and evaluating public facility proposals; and

WHEREAS on June 21, 1999, the Board of Skagit County Commissioners adopted Ordinance 17478 authorizing an additional .04% sales tax rebate from Washington State for public facility financing pursuant to Chapter 311, Laws of 1999; and

WHEREAS on April 12, 2000, the Board of Skagit County Commissioners adopted Resolution 17837, issuing bonds of $8,000,000 to finance public facility projects within Skagit County with the principal and interest to be repaid from the sales tax collected; and

WHEREAS on June 25, 2007, the Board of Skagit County Commissioners adopted Ordinance O20070006, authorizing an additional .01% sales tax rebate from Washington State for Public facility financing pursuant to Chapter 478, Laws of 2007; and

WHEREAS on May 1, 2007, the Washington State Legislature passed House Bill 1543 which allows public facility moneys to be used to pay for personnel in economic development offices; and

WHEREAS the Advisory Committee met on May 3, 2017 to evaluate and discuss project submittals and recommend ten public facility projects and funding for personnel at the Economic Development Association of Skagit County (EDASC); and

WHEREAS the Board of County Commissioners has reviewed and revised the recommendations from the Advisory Committee.

NOW, THEREFORE, BE IT RESOLVED AND IT IS HEREBY ORDERED that the following funding be awarded from the Rural Distressed County sales tax authorized by the State of Washington and Skagit County Ordinances and Resolutions:

Port of Skagit County – Fiber Optics - $1,200,000
Port of Skagit County – Peak Sherpa Project - $300,000
City of Sedro-Woolley – SR 20 East Lane Widening & Safety Improvements - $300,000
Port of Anacortes – Pier 2 Bulkhead Wall Improvements - $300,000
EDASC – Operations (Staffing) - $200,000

City of Anacortes - EDASC – Investment - $7,200
City of Burlington – EDASC – Investment - $7,500
City of Mount Vernon – EDASC – Investment - $10,000
City of Sedro-Woolley – EDASC – Investment - $2,000
Town of La Conner – EDASC – Investment - $1,000
Skagit County - EDASC – Investment - $47,000

All agencies awarded grant funds shall enter into an agreement with Skagit County further outlining the structure of the award. Grant funds will be disbursed on a reimbursement basis as the projects are constructed.

IN TESTIMONY WHEREOF, WE HEREUNTO SET OUR HANDS AND THE OFFICIAL SEAL OF OUR OFFICE THIS 22 day of May, 2017.

BOARD OF COUNTY COMMISSIONERS
SKAGIT COUNTY, WASHINGTON

SKAGIT COUNTY COMMISSIONERS SEAL COURT STATE OF WASHINGTON

Ron Wesen, Chair

Kenneth A. Dahlstedt, Commissioner

Lisa Janicki, Commissioner

ATTEST:

Amber Emps
Clerk of the Board

RECOMMENDED:

Department Head

APPROVED AS TO FORM:

(5/18/2017)
Deputy Prosecuting Attorney

AGENCY: **ENVIRONMENTAL PROTECTION AGENCY (EPA)**

TITLE: **Clean Diesel Funding Assistance Program FY 2017**

ACTION: **Request for Proposals (RFP)**

RFP NUMBER: **EPA-OAR-OTAQ-17-04**

CATALOG OF FINANCIAL DOMESTIC ASSISTANCE NUMBER: 66.039

IMPORTANT DATES

Tuesday, April 18 2017	RFP OPENS
Tuesday, June 20, 2017	RFP CLOSES – PROPOSALS DUE
August-September 2017	ANTICIPATED NOTIFICATION OF SELECTION
October-December 2017	ANTICIPATED AWARD

The closing date and time for receipt of proposals is **Tuesday, June 20, 2017, at 11:59 p.m. Eastern Time (ET)** in order to be considered for funding. Proposal packages must be submitted electronically to EPA through Grants.gov (www.grants.gov) no later than **Tuesday, June 20, 2017, at 11:59 p.m. (ET)** in order to be considered for funding.

SUMMARY

EPA's Office of Transportation and Air Quality is soliciting proposals nationwide for projects that achieve significant reductions in diesel emissions in terms of tons of pollution produced by diesel engines and diesel emissions exposure, particularly from fleets operating at or servicing goods movement facilities located in areas designated as having poor air quality. Further, priority for funding may be given to projects which result in outcomes that benefit affected communities, those that engage affected communities with respect to the design and performance of the project, and those which can demonstrate the ability to promote and continue efforts to reduce emissions after the project has ended.

Eligible diesel emission reduction solutions include verified emission control technologies such as exhaust controls, cleaner fuels, and engine upgrades, verified idle reduction technologies, verified aerodynamic technologies and low rolling resistance tires, certified engine replacements, and/or certified vehicle or equipment replacement.

Eligible diesel vehicles, engines and equipment may include buses, Class 5 – Class 8 heavy-duty highway vehicles, marine engines, locomotives and nonroad engines, equipment or vehicles used in construction, handling of cargo (including at a port or airport), agriculture, mining or energy production (including stationary generators and pumps).

Eligible entities include regional, state, or local agencies, tribal governments (or intertribal consortia) and native villages, or port authorities, which have jurisdiction over transportation or air quality, and nonprofit organizations or institutions that: a) represent or provide pollution reduction or educational services to persons or organizations that own or operate diesel fleets or b) have, as their principal purpose, the promotion of transportation or air quality.

Summary of What EPA Will Fund

- **Verified Exhaust Control Technologies**: EPA will fund up to 100% of the cost (labor and equipment) of eligible verified exhaust control technologies.
- **Verified Engine Upgrades and Certified Remanufacture Systems**: EPA will fund up to 40% of the cost (labor and equipment) of eligible verified engine upgrades and certified remanufacture systems.
- **Verified/Certified Cleaner Fuel Use**: EPA will not fund stand-alone cleaner fuel use. EPA will fund the cost differential between the eligible cleaner fuel and conventional diesel fuel if the cleaner fuel is used in combination, and on the same vehicles, with new eligible verified exhaust controls or eligible engine upgrades, engine replacements, or vehicle/equipment replacements funded under this RFP.
- **Verified Idle Reduction Technologies**:
  - **Verified On-Highway Idle Reduction Technologies:** EPA will fund up to 25% of the cost (labor and equipment) of verified idle reduction technologies on long-haul trucks and school buses.
  - **Verified Locomotive Idle Reduction Technologies**: EPA will fund up to 40% of the cost (labor and equipment) of eligible idle reduction technologies for locomotives.
  - **Marine Shore Connection Systems:** EPA will fund up to 25% of the cost (labor and equipment) of eligible marine shore connection systems.
  - **Electrified Parking Spaces**: EPA will fund up to 30% of the cost (labor and equipment) of eligible shore connection systems.
- **Verified Aerodynamic Technologies and Low Rolling Resistance Tires:** EPA will not fund stand-alone aerodynamic technologies or low rolling resistance tires. EPA will fund up to 100% of the cost (labor and equipment) of verified aerodynamic technologies or verified low rolling resistance tires if the technology is combined on the same vehicle with a new eligible verified exhaust control technology funded under this RFP.
- **Certified Engine Replacement:** EPA will fund up to 40% of the cost (labor and equipment) of replacing a diesel engine with a diesel or alternative fueled engine (including hybrids) certified to EPA emission standards. EPA will fund up to 50% of the cost of replacing diesel engine with an engine certified to meet CARB's Optional Low-NOx Standards. EPA will fund up to 60% of the cost (labor and equipment) of replacing a diesel engine with an electric motor or electric power source.
- **Certified Vehicle/Equipment Replacement**: EPA will fund up to 25% of the cost of a replacement vehicle or piece of equipment powered by a diesel or alternative fueled engine (including hybrids) certified to EPA emission standards. EPA will fund up to 35% of the cost of a replacement vehicle or piece of equipment powered by an engine certified to meet CARB's Optional Low-NOx Standards. EPA will fund up to 45% of the cost of a replacement vehicle or piece of equipment powered by an electric motor or electric power source.
  - **Replacement of Drayage Trucks**: EPA will fund up to 50% of the cost of a replacement drayage truck.

FUNDING / AWARDS

EPA anticipates awarding at least $11 million in DERA grant funding under this announcement. The total available funding and the size and number of grants awarded are subject to the availability of funds, the quality of proposals received, and other applicable considerations. Awards will be issued and managed through EPA's Regional Offices.

!! IMPORTANT – READ THIS FIRST !!

All applicants must submit their proposals electronically through www.grants.gov as explained in Appendix A.

If your organization is not currently registered with Grants.gov, please encourage your office to designate an Authorized Organization Representative (AOR) and ask that individual to begin the registration process as soon as possible. Please note that the registration process also requires that your organization have a DUNS number and a current registration with the System for Award Management (www.SAM.gov) and the process of obtaining both could take a month or more. Applicants must ensure that all registration requirements are met in order to apply for this opportunity through grants.gov and should ensure that all such requirements have been met well in advance of the submission deadline. Registration on Grants.gov, SAM.gov, and DUNS number assignment is FREE.

We recommend that you try to submit your application to www.grants.gov at least three days prior to the deadline. Minor problems are not uncommon with transfers to Grants.gov. It is essential to allow sufficient time to resolve any submission issues BEFORE the due date identified in Section IV of the solicitation.

Paul A. Randall-Grutter

From: cleandiesel <cleandiesel@erg.com>
Sent: Tuesday, June 06, 2017 10:13 AM
To: Forrest Jones
Subject: RE: RFP Question

Dear Forrest,

Thank you for contacting the Clean Diesel Helpline about EPA's 2017 Clean Diesel Funding Assistance Program. The full Request for Proposals is posted on the website at www.epa.gov/cleandiesel/clean-diesel-national-grants.

A question similar to yours has been addressed in the 2017 Frequently Asked Questions document at www.epa.gov/cleandiesel/clean-diesel-national-grants. Please let us know if you need further clarification on the response below or if you have additional questions.

Question/Answer

B.vii.13: Are marine vessel replacement projects eligible for funding?

Answer: No, full marine vessel replacement projects are not eligible. Marine engines are eligible for engine replacement and engine upgrades.

Question and Answer Process
During the open competition period, EPA will only accept questions in writing at cleandiesel@epa.gov. According to EPA competition procedures, we must answer questions in a manner that makes the information available to all potential applicants. EPA will respond to your question with a written answer in the FAQ document, to be updated weekly on the website listed above.

Submission Deadline
Proposal packages must be submitted electronically to EPA through www.grants.gov no later than **Wednesday, July 5, 2017, at 11:59 p.m. Eastern Time** in order to be considered for funding.

For more information on Clean Diesel funding programs, please visit the website at www.epa.gov/cleandiesel. While there, you may also be interested in subscribing to EPA Clean Diesel News to be alerted about pertinent news, including grants and funding information.

Regards,
Grant
ERG, Contractor to U.S. EPA

EPA's Clean Diesel Helpline
1-877-NCDC-FACTS (1-877-623-2322)
www.epa.gov/cleandiesel

From: Forrest Jones [mailto:forrestj@co.skagit.wa.us]
Sent: Tuesday, June 6, 2017 11:28 AM
To: 'cleandiesel@epa.gov' <cleandiesel@epa.gov>
Subject: RFP Question

Hi,

Skagit County is the owner operator of an approximately 100 vehicle ferry. We are currently seeking funding for a Ferry Replacement that would include moving to an All Electric powered ferry.

I realize this grant includes power or engine replacement, but would a ferry replacement also qualify under this grant provide we do move to an all-electric power source?

Thanks

Forrest Jones / Skagit County Public Works
1800 Continental Place Mount Vernon, WA 98273
Transportation Programs Section Manager
W: 360-416-1422 / Cell: 360-708-8627

SCOG
SKAGIT COUNCIL OF GOVERNMENTS
204 W Montgomery • Mount Vernon • WA • 98273 www.scog.net

2018-2023 REGIONAL STP PROJECT APPLICATION

Local Agency Project Endorsement

Project Title: **GUEMES FERRY BOAT REPLACEMENT / OVERHAUL MODIFICATIONS**

The attached project application reflects established local funding priorities consistent with the adopted local plans and/or programs.

The project described is financially feasible; local match revenue is available and will be committed to the project if it receives the requested STP grant.

Costs identified in the application represent accurate planning level estimates needed to accomplish the work described herein. Any cost overruns are the responsibility of the project sponsor. All details claimed in the project application will be included in the final project.

The use of federal funds for this project entails administrative and project compliance for which the project sponsor will be responsible.

This project has the full endorsement of the governing body/leadership of this agency or organization.

Paul Randall-Grutter, P.E. County Engineer
Name and Title of Designated Representative

Paul A. Randall-Grutter
Signature of Designated Representative

4.26.17
Date

SKAGIT COUNTY

1800 Continental Place
Mount Vernon, WA 98273

Surface Transportation Program Application Submittal

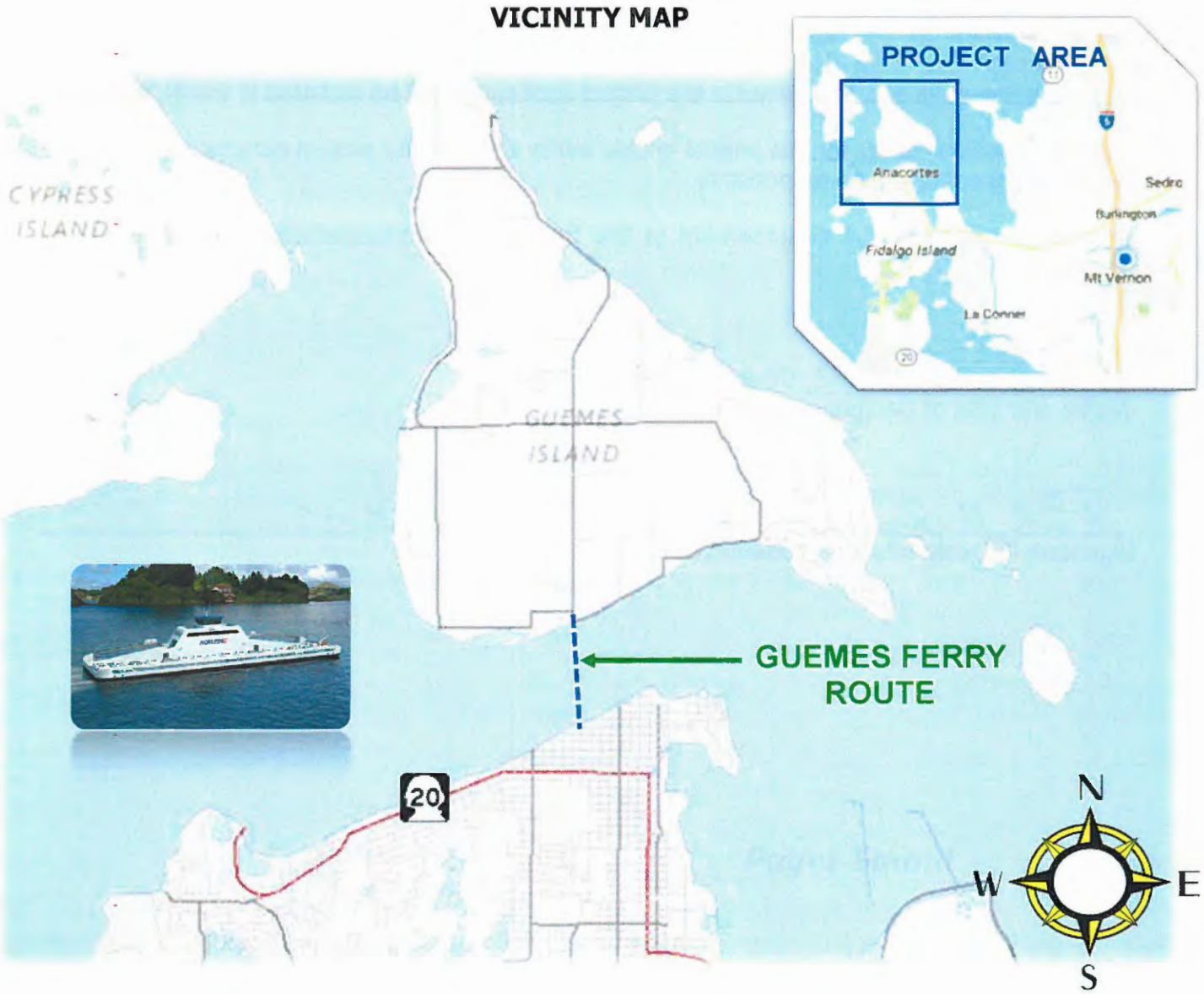
2018-2023

Guemes Ferry Boat Replacement / Overhaul Modifications

PROJECT TYPE: TRANSPORTATION

RUARL PROJECT FUNDING REQUESTED: $1,351,252

VICINITY MAP



2018-2023 Surface Transportation Program
Project Application

Project Title: M/V Guemes Ferry Boat Replacement / Overhaul Modifications

General Project Information

Agency or Organization: SKAGIT COUNTY

Contact Person: Forrest Jones

Phone Number: 360-416-1422

Email Address: forrestj@co.skagit.wa.us

Project Information

All eligibility criteria must be met at time of application. Projects that do not meet the STP eligibility criteria at the time of application will be removed from consideration.

Project Location: Anacortes / Guemes Island Ferry Terminal

Is the project sponsor requesting urban or rural STP funds (use this map to determine geography)? ☐Urban ☑Rural

Federal Functional Classification: N/A

Beginning Termini: N/A

Ending Termini: N/A

Project Length (in miles): N/A

Project Description
Include the project scope, purpose, and brief comparison of existing and proposed conditions (1,000 characters).
This project involves preliminary engineering, design, and construction of an all-electric replacement vessel or alternative propulsion system for the 37-year old M/V Guemes. The project will also include a retro-fit of the Anacortes terminal for a charging station if

necessary.The switch to an all-electric ferry or other alternative propulsion system will increase service reliability while reducing or eliminating approximately 52,000 gallons of diesel that equates into 62,000kg of greenhouse gas emissions and operating expenditures.

Has the project been submitted to SCOG in the web-based STIP software? ☑Yes STIP ID: WA-01265

PUBLIC INVOLVEMENT

Is this project identified in sponsor agency's long range plan? ☑Yes Project ID: WA-01265
Please provide link to document:
www.skagitcounty.net/PublicWorksFerry/Documents/2017%20Fourteen%20Year%20Ferry%20Capital%20Improvement%20Plan.pdf

Is this project identified in sponsor agency's six-year comprehensive transportation program (TIP) or equivalent? ☑Yes
Project ID: WA-01265
Please provide link to document:
www.skagitcounty.net/Common/Documents/LFDocs/COMMISSIONERS000007/00/00/1d/00001dd3.pdf

What project in the regional transportation plan (pages 59-63) is this project implementing? ID #:

Date of public meeting(s) in which the documents identified above were approved by sponsor agency's governing authority: 11/8/2016

PROPOSED TIMELINE

	PE	RW	CN	Other
Earliest possible obligation date (mm/dd/yy)	2017	N/A	2020	
Estimated completion date (mm/dd/yy)	2017	N/A	2020	

ATTACHMENTS

Project sponsor has included:

- ☑Vicinity Map
- ☑Signed Project Endorsement Form
- ☐Engineer's Estimate
- ☐Typical Section (If applicable)
- ☐Written Concurrence (if project is within or connects to right of way of another agency)
- ☐Written acknowledgment from Skagit Transit and/or Island Transit (If project is located on fixed route transit line)

Cost Summary

A. Previous obligations (all fund sources, all phases)	$	STP funding is requested for the following phases (check all that apply):
Fund Source:	$	
Fund Source:	$	
Fund Source:	$	☑Preliminary Engineering/Design
B. Requested STP funds	$1,351,252	☐Right-of-way
C. Other secured federal funds. Source: Ferry Boat Program	$765,490	☑Construction
D. Other secured state funds. Source:	$	☐Other (planning, etc.)
E. Secured local funds (minimum 13.5%). Source: Skagit County	$200,000	
F. Secured private funds. Source:	$	
G. Other planned phases	$17,683,258	
H. Total estimated project cost (all phases). Sum of A through F.	$20,000,000	

Cost summary notes (optional, 1,000 characters): The total proposed funding listed in line "G" Other planned phases include potential funding sources by th CRAB through the County Ferry Capital Inprovement Program of $10,000,000. In addition, Skagit County will be reviewing other funding sources such as a low interest loan through the Public Works Trust Fund and/or issuing bonds. The County is also seeking funding through the EPA for deisel reduction grants and the Volkswagon settlement to supplement total costs.

Describe the commitment of secured matching funds and the status of obtaining any unsecured funds. (Note: Matching funds must be available at the time of fund obligation. 1,000 characters) Skagit County Public Works is committed to providing the needed matching funds for this project and will budget any remaining amount through the Road Fund. (See Cost summary notes.)

The maximum amount of STP Urban funds that can be awarded to any one project is $2,603,972. The maximum amount of STP Rural funds that can be awarded to any one project is $1,351,252.

Economic Vitality — 20 Maximum

Consistency with Economic Development Plans — 2

Is project consistent with an adopted economic development/revitalization plan or other plan/initiative with an economic development component? If so, please cite the plan and page number that describes the economic development project. The Economic Development chapter of Skagit County's 2016-2036 Comprehensive Plan contains Goal 11B-7, related to the Marine Industry, which recognizes the importance of the marine-based economy. In addition, the ferry replacement study is identified on page 455 (project ID 43) on the 20-year project list.

Hyperlink to plan:https://www.skagitcounty.net/PlanningAndPermit/Documents/CompPlan2016/comp-plan-2016-adopted-text-only.pdf
If no hyperlink is available, please provide plan in another way.

FREIGHT NETWORK 5

Is the project located on a state-designated freight route?

☐T-1 5
☐T-2 4
☐T-3 3
☐T-4 2
☐T-5 1

PRIVATE PARTNER FUNDS 4

Have private partners pledged funding to this project? If so, how much? $ (1 point per 2% of total amount of STP funds requested.) Note: this does not include traffic impact fees and/or any funds identified as local match.

To receive points in this category, project sponsor must include signed pledge sheet from private partner(s) with pledged funding level.

ENVIRONMENTAL JUSTICE (SCOG WILL PERFORM THIS ANALYSIS) 4

Is project within 100 feet of low income census tract? ☐ 2

Is project within 100 feet of minority census block? ☐ 2

EXISTING AND FUTURE DEVELOPMENT (SCOG WILL PERFORM THIS ANALYSIS) 8

Project is located in area of significant existing employment or future employment growth. SCOG will perform this analysis. For the 2012 measure, all of the submitted projects will be divided into thirds based on highest rate of existing employment per acre in the transportation analysis zones the project is within. For the 2040 measure, the projects will be divided into thirds based on the number of new jobs per acre in the transportation analysis zones the project is within. Project will receive points for the highest point value geography it touches or passes through.

2012 Employment

☐ Low density 0

☐ Medium Density 4
☐ High Density 8

2036 Employment Growth Density

☐ Low Density 0
☐ Medium Density 4
☐ High Density 8

SAFETY — 20 MAXIMUM

COLLISION HISTORY

- Collisions within project limits during study period (Relative Scale) 0-10
  - Staff will make available the most recent 3-year WSDOT Transportation Data & GIS Office collision data (Under 23 United States Code - Section 409. This data cannot be used in discovery or as evidence at trial in any action for damages against the WSDOT, the State of Washington, or any jurisdictions involved in the data). Project applicant must provide location and details for correctable collisions (not random, unpreventable incidences) on the proposed project facility.
  - Fill out a separate row for each collision. Provide information on the location, collision type, severity, number of vehicles involved, and primary countermeasure to eliminate or mitigate collision (must be consistent with project scope)
  - SCOG staff will score projects on a sliding scale.
  - **Only collisions that could be addressed by the proposed project will be used for the calculation**.

Report Number	Collision Location	Collision Type (head-on, broadside, etc.)	Is this a PDO crash? (No =0, Yes =1)	Number of Injuries	Number of Fatalities	Number of vehicles involved	Primary Countermeasure

If necessary, enter additional collisions on a separate sheet.

Collision Type	A: Total instances	B: Average Cost	C: Total Cost (AxB)	Annual Benefit (C/3)
Property Damage Only (vehicles)		$6,700		
Injuries		$375,000		
Fatalities		$4,400,000		
Total				

☐ Has project sponsor been awarded funding for this location in the past?

Project sponsor may not receive collision safety points if previous funding has been awarded to address safety issues at the project location. If the project is addressing a safety concern that has previously been funded, please describe how this approach is different:

ACCESS MANAGEMENT 4

☐ Does this project include a non-traversable median to limit mid-block left turns? 2

☐ Does this project reduce the number of driveway access points along the project length? 2

☐ Does this project add or improve intersection turn channelization? 2

Other Safety — 10

☐ Is the project located on an evacuation route? (SCOG will perform this analysis) 2

☐ Does this project enhance delineation and/or friction for horizontal curves? 2

☐ Does this project provide a buffer between pedestrians and roadway (above and beyond shoulders, curb and gutter, etc.)? 2

☐ Does this project use safety edge surface treatment on a roadway without a curb and gutter? 2

☐ Does this project include a road diet? 2

☐ Does this project include minimum 4-foot paved shoulder with painted fog stripe? 2

☐ Does this project include additional lighting that enhances visibility at night? 2

☐ Does this project include a transit pullout (must be a designated space for buses to pull out of the travel lanes)? 2

☐ Does this project include a traffic calming measure such as bulbouts, speed humps, radar signs, pedestrian crossing signs, etc? 2

Mobility — 20 Maximum

Network Development

☐ Does this project improve a route that is proximate and parallel to regional network corridor? This must be demonstrated by a formal traffic study. (Include traffic study with project submittal.) 2

☐ Does this project improve transit access and/or amenities on a current or planned Skagit Transit and/or Island Transit fixed route? (Include letter from transit agency to verify.) 3

☑ Does this project include provisions for data collection (transit ridership, vehicular counts, bicycle counts, etc.)? 2

☐ Does this project include bicycle wayfinding? 2

Note: to receive credit for the features listed below, they must be specified in the project description submitted in the web-based STIP software.

☐ Does this project include a paved, separated trail? 4

☐ Does this project add or improve sidewalks for at least 50% of the total project length? 2

☐ Does this project include bicycle lanes for at least 50% of the total project length (must include clear designation such as signage and/or pavement markings)? 2

☐ Does this project enhance an existing unsignalized intersection with a signal or roundabout? 6

REGIONAL NATURE — 10 MAXIMUM

REGIONALLY SIGNIFICANT PROJECTS — 10

☐ Is this project identified in the Skagit 2040 Regional Transportation (for capacity expansion projects)? 10

NON-REGIONALLY SIGNIFICANT PROJECTS — 10

☑ Is project located on regional network? 10

PROJECT FUNDING/READINESS — 15 MAXIMUM

PROJECT FUNDING (SCOG WILL SCORE THIS SECTION) — 5

Other secured or previously obligated funding (other than required match and private investment, 1 point per source) ... 0-3

More than required 13.5% local match (1 point per additional 5%) 0-2

PROJECT READINESS — 10

☐ Environmental permits approved or categorically excluded (please include applicable documentation) 5

☐ PS&E package complete (please include documentation) 5

☑ Right of way acquisition complete or not necessary (please include applicable documentation) 5

PRESERVATION/MAINTENANCE — 5 MAXIMUM

Please describe how this project addresses the regional goal to maintain, preserve and extend the life and utility of prior investments in transportation systems and services (1,000 characters). The Guemes Ferry provides an essential link to 19.65 miles of roads on Guemes Island for approximately 600 residents. The long-term reliability of the ferry will build upon the existing infrastructure on the island and the ferry terminals. In addition, it will ensure the reliable movement of freight and goods as well as daily and recreational commuting. The M/V Guemes carried 183,130 vehicles and 381,559 passengers in 2015. Sources: Skagit 2040 Regional Transporation Plan, Guemes Island Sub-Area Plan.

Please attach any supporting information.

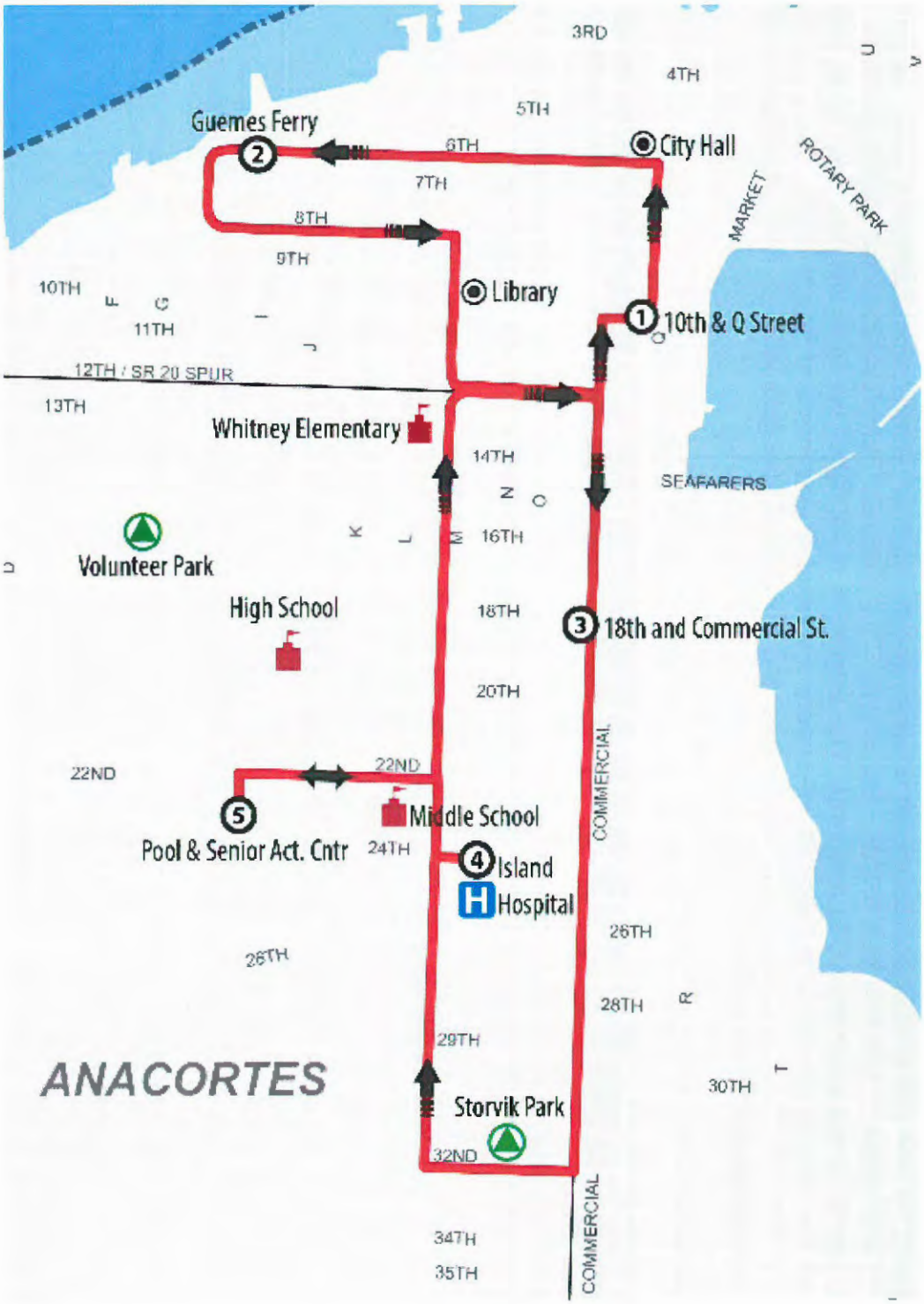
TAC PRIORITY — 10 MAXIMUM

The TAC will perform a survey to rank the submitted projects relative to each other. The top-ranked project will receive 10 points; the second-ranked project will receive 9 points, etc. Projects not ranked in the top ten will receive zero points.

Route 409

Route 409 Anacortes

Map



SKAGIT COUNTY
PUBLIC WORKS DEPARTMENT

1800 Continental Place, Mount Vernon, WA 98273-5625
(360) 416-1400 FAX (360) 416-1405

April 17, 2017

Dear Public Works Board,

I am writing on behalf of Skagit County to express the importance of Skagit County's Ferry Replacement Project and offer our support for full funding of the Public Works Construction Loan Program.

Skagit County owns and operates a 38 year-old, 21-vehicle, 99-passenger, diesel-powered ferry that provides service between the City of Anacortes and Guemes Island. There are no alternate routes that provide access to the island, therefore making the ferry a vital piece of our infrastructure. The age of the vessel, and ever increasing maintenance costs, have made replacement a very likely alternative.

The new ferry is still in preliminary design phase, but a propulsion study was performed which concluded that the all-electric technology is a feasible option for this ferry route. If successful, the new ferry will be one of the first all-electric vehicle ferries in the United States of America. This project directly benefits Washington state residents, taxpayers, the local community and many stakeholders. Development of an all-electric ferry demonstrates that Skagit County and Washington State are technology leaders willing to invest in safe, environmentally conscious, clean energy projects that benefit both the local community and the global environment. This very important project will reduce harmful greenhouse gas emissions, increase energy independence, and significantly reduce operating expenditures.

Skagit County plans to submit a Construction Loan Application when it becomes available in the next biennium. In the meantime, we will continue to pursue grant funding and other avenues of funding. Please let us know how we can help support the Public Works Board and funding for the Construction Loan Program.

Sincerely,

Paul A. Randall-Grutter, P.E. County Engineer

Cc: Dan Berentson, Director of Public Works
Keith Elefson, P.E. Engineering Division Manager