

# Sustainable Transportation and Energy Program

*Keep Alaska Moving through  
Strategic Investments in  
Safety, State of Good Repair,  
Economic Vitality, Resiliency,  
and Sustainability.*



Priorities & Goal  
Areas in  
Transportation  
Infrastructure  
Investment

Safety

State of Good Repair

Economic Vitality

Resilience

Sustainability

**\$113,000,000,000  
over 5 Years!**

# Sustainable Transportation & Energy Program (STEP) Goal

Help communities thrive through transportation investments that promote independence, efficiency, low-cost transportation, and a healthy & quality of life.



## United Nations Sustainable Development Goals (SDGS)

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- #7: Affordable & clean energy
- #9: Industry, innovation, & Infrastructure
- #11: Sustainable cities and communities
- #12: Responsible cities and communities
- #13 Climate Action
- Life on Water
- #15: Life on Land
- #17 Partnerships for the Goals



# Sustainable Transportation Infrastructure

**Viable**



**ECONOMIC  
DEVELOPMENT**

**Equitable**



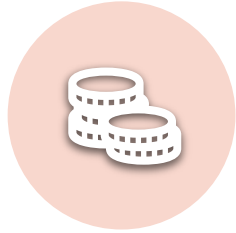
**SOCIAL EQUITY**

**Sustainable**



**ENVIRONMENTAL  
QUALITY**

# STEP Objectives



## ECONOMIC DEVELOPMENT

1

Offer choices of affordable transportation and support a competitive economy.



## SOCIAL EQUITY

2

Promote equity within and between successive generations.



## ENVIRONMENTAL QUALITY

3

Limit air, water, and noise emissions, waste, and resource use.

# STEP Outcomes

Create	Create thriving energy-independent healthy communities by strengthening energy security
Expand	Expand the economy
Provide	Provide mobility to disadvantaged people
Foster	Foster a healthy environment
Improve	Improve public health
Enable	Enable Alaskans to spend less at the pump

# Program Focus Areas

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Sustainable Transportation & Energy Research

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Energy Independence Investments

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AMHS Fleet Modernization

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Statewide Equipment Fleet Modernization

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Sustainable Transit

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Low-Cost Transportation

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Energy Efficiency

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Healthy Environment

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Equitable Transportation

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Sustainable Freight

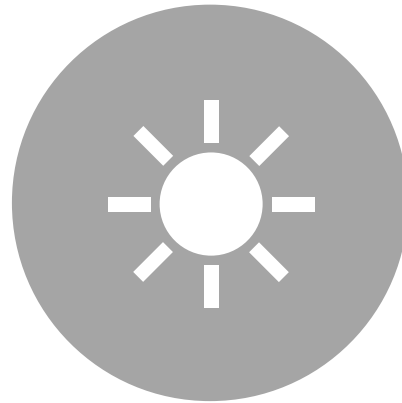
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# Sustainable Transportation Research



FHWA LOW-NO EMISSION  
FERRY RESEARCH



RENEWABLE DIESEL  
RESEARCH



AUTOMATION THROUGH  
DIGITIZATION

# Energy Independence Investments

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ROADS TO ENERGY  
RESOURCES



LNG DEVELOPMENT

# AMHS Fleet Modernization



Tustumena Replacement Vessel (TRV)  
Construction



Low-No Emission Shuttle Ferry  
Construction



Shoreside Charging



Ferry Retrofits

# Statewide Equipment Fleet Modernization

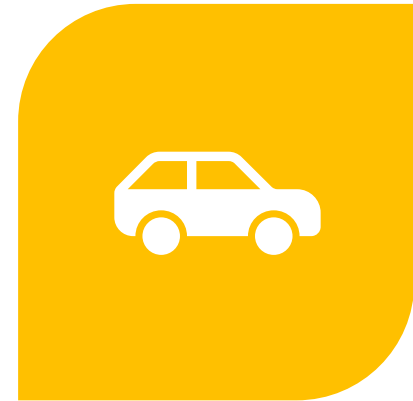
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STATEWIDE FLEETWIDE  
MODERNIZATION



ROLLING STOCK  
ELECTRIFICATION



AIRPORT SEF EV CHARGING  
STATIONS PROJECT

# Sustainable Transit

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PUBLIC TRANSIT  
MODERNIZATION



COMPRESSED NATURAL  
GAS BUSES



ELECTRIC BUSES

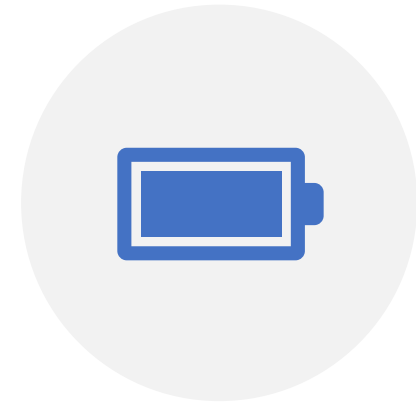
# Low-Cost Transportation



ALTERNATIVE ENERGY CORRIDORS  
EV INFRASTRUCTURE



RURAL COMMUNITIES EV  
INFRASTRUCTURE



AIRPORT EV CHARGING STATIONS

# Energy Efficiency

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DOT&PF Facilities Energy  
Efficiency Upgrades

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LED Streetlight Conversions

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Lights off at night!

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Solar Power Farms on Airport  
Property

# Healthy Environment

Tracking Transportation  
Emissions

Rural Dust Mitigation

Cruise Line and Port  
Facilities Electrification



# Equitable Transportation



Promoting equity within and  
between successive generations.

# Sustainable Freight

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# Funding Programs

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Carbon Reduction Program

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National Electric Vehicle Infrastructure (NEVI) Formula Program

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Low-No Emission Vehicle Program

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Ferry Boat Formula Funds; Low-Emission Electric Ferry

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Reduction of Truck emissions at Port Facilities

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CMAQ: Congestion Mitigation and Air Quality Improvement

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EPA Clean School Buses

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Charging and Fueling Infrastructure Grants

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Other discretionary grant programs

# Next Steps

- Building a Team
- STEP Roadmap; Risk/Innovation Registers
- Sustainable Transportation Parent Plan
  - NEVI Plan
  - Carbon Reduction Plan
  - AMHS Electrification Plan
- Criteria for Project Selection
- Policy Recommendations to Support STEP Targets

Build – Install – Test - Adjust

# The STEP Team: RD&I

DOT&PF

AEA

ACEP and  
Universities

National Labs

Industry  
Innovators

YOU-  
Communities

# Clean Transportation Leadership Roundtable

Hosted and Facilitated by Launch Alaska

September 26<sup>th</sup>, 2022 8:00-11:30 @ Atwood Building

## **ROUNDTABLE GOALS**

- Illustrate technology trends and corporate sustainability initiatives to inspire accelerated adoption of clean transportation alternatives.
- Share best practices and infrastructure requirements to inform state transportation planning related to federal infrastructure spending.
- Identify pain points that can inform climate tech innovators and startups.

*FACILITATE*

*PLAN*

*DEPLOY*

*IMPACT*

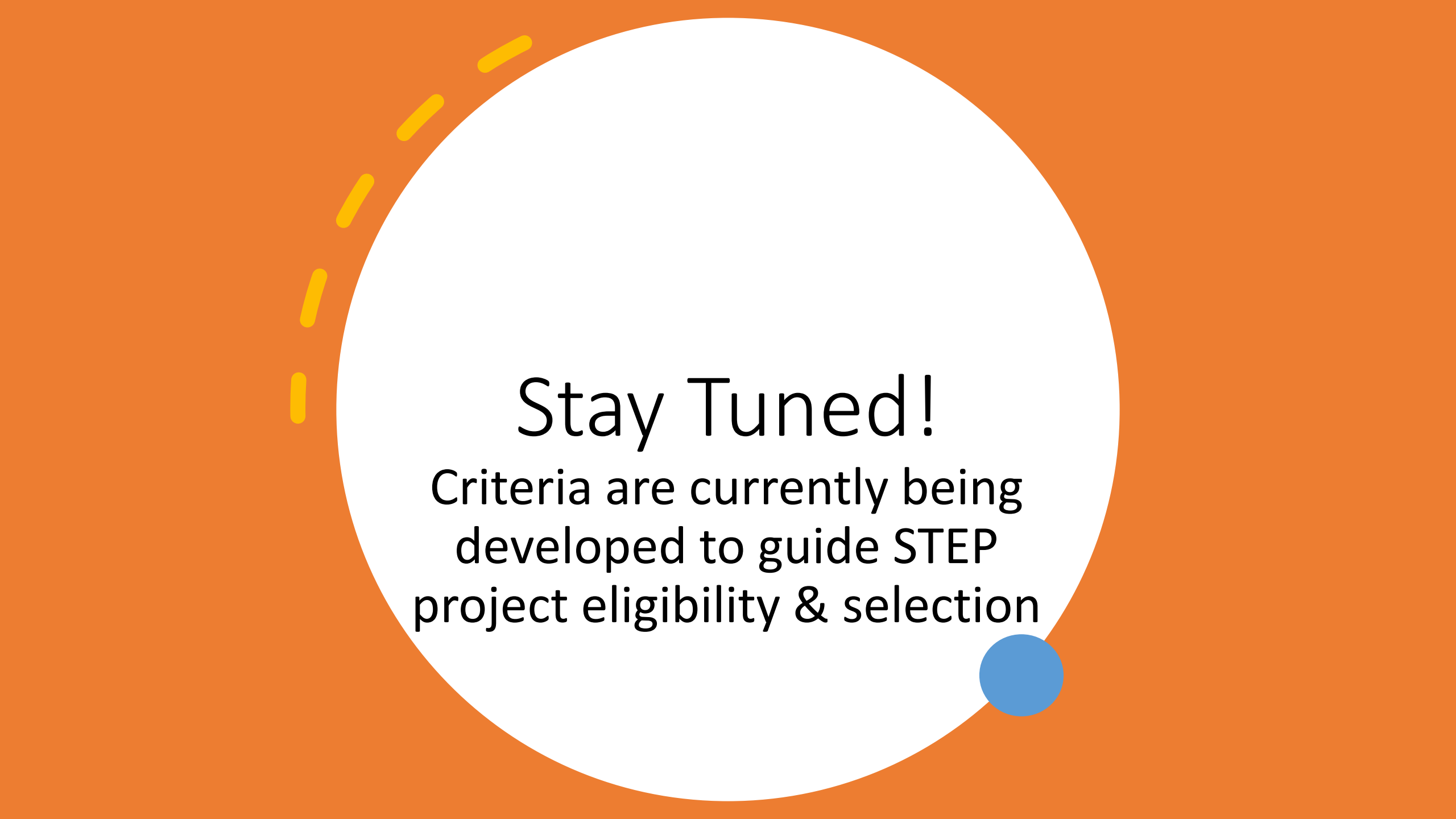
# Risk Register

- Global politics and development
- Major accident/disaster
- Trusting technology

# Innovation Register

- Remote real-time monitoring and future remote control
- Sniffer drones can be used to collect emissions
- Data analytics for operational optimization
- E-navigation and Smart Control (NES)
- 'Green' Procurement Incentives





# Stay Tuned!

Criteria are currently being developed to guide STEP project eligibility & selection

# Please be a part of the discussion!

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Subscribing to updates will allow DOT&PF to inform you of key programmatic milestones and new developments.

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Call us at 855-925-2801 and use the code 3660  
to leave a message

Text the letters STEP to 73224

Go online to <http://publicinput.com/STPAK>

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