



City of Fort Bragg

416 N Franklin Street
Fort Bragg, CA 95437
Phone: (707) 961-2823
Fax: (707) 961-2802

Meeting Agenda City Council

*THE FORT BRAGG CITY COUNCIL MEETS CONCURRENTLY
AS THE FORT BRAGG MUNICIPAL IMPROVEMENT DISTRICT
NO. 1 AND THE FORT BRAGG REDEVELOPMENT SUCCESSOR
AGENCY*

Monday, March 28, 2016

6:00 PM

Town Hall, 363 N. Main Street

MEETING CALLED TO ORDER

PLEDGE OF ALLEGIANCE

ROLL CALL

AGENDA REVIEW

1. MAYOR'S RECOGNITIONS AND ANNOUNCEMENTS

- 1A. [16-097](#) Presentation of Proclamation Declaring April 2016 as "Child Abuse and Neglect Prevention Month"

Attachments: [05-2016 Child Abuse Prevention Month Proclamation](#)

- 1B. [16-100](#) Presentation by Leadership Mendocino Executive Director Heidi Cusick Dickerson and 2015 Scholarship Recipients

Attachments: [Leadership Mendocino PowerPoint](#)

- 1C. [16-090](#) Receive Presentation Regarding the Northwest California Alternative Fuels Readiness Plan (AFRP) Project

Attachments: [Alternative Transportation Fuels Planning Project Flyer](#)
[Alternative Fuels 101 PowerPoint](#)
[Alternative Fuels & Fleets the Future is Now](#)
[California Incentives Available to the North State Region](#)
[1C Clean Cities 2016 Vehicle Buyer's Guide](#)

- 1D. [16-109](#) Proclamation of the Fort Bragg City Council Expressing Continuing Support and Admiration for the Town of Otsuchi, Japan on the Occasion of the Inauguration of a New Community Facility at Namiita Beach

Attachments: [Otsuchi Proclamation for Remember Hope Namiita Beach Village](#)

2. STAFF COMMENTS

3. MATTERS FROM COUNCILMEMBERS

4A. PUBLIC COMMENTS ON NON-AGENDA, CONSENT CALENDAR & CLOSED SESSION ITEMS (30 Minutes)

MANNER OF ADDRESSING THE CITY COUNCIL: Any member of the public desiring to address the City Council shall submit a "Speaker Card" to the City Clerk and proceed to the podium after being recognized by the Presiding Officer. Speakers will be called up in the order the Speaker Cards are received. All remarks and questions shall be addressed to the City Council and no discussion or action shall be taken on any requests, in accordance with Brown Act Requirements. No person shall enter into any discussion without being recognized by the Mayor or acting Mayor.

IF AGENDA PERMITS: A maximum of thirty (30) minutes shall be allotted to receiving public comments at the initial public comment period and, if necessary, an additional 30 minutes shall be allotted to public comments prior to action on the Consent Calendar. Any citizen, after being recognized by the Mayor or acting Mayor, may speak on any topic that may be a proper subject for discussion before the City Council for such period of time as the Mayor or acting Mayor may determine is appropriate under the circumstances of the particular meeting, including but not limited to, the number of persons wishing to speak on a particular topic or at a particular meeting, or the complexity of a particular topic. Time limitations shall be set without regard to a speaker's point of view or the content of the speech, as long as the speaker's comments are not disruptive of the meeting.

BROWN ACT REQUIREMENTS: Pursuant to the Brown Act the Council cannot discuss issues or take action on any requests during this comment period.

5. PUBLIC HEARING

When a Public Hearing has been underway for a period of 60 minutes, the Council must vote on whether to continue with the hearing or to continue the hearing to another meeting.

6. CONDUCT OF BUSINESS

- 6A. [16-106](#)** Receive Council Ad Hoc Committee Report on Interviews with Lodging Owners; Receive Committee Recommendations Regarding Potential Ballot Measure to Increase Fort Bragg's Transient Occupancy Tax (Bed Tax) Rate and Modifications to the City's Marketing and Promotions Program; and Provide Direction to Staff

Attachments: [03282016 Lodging Interviews, TOT Measure & FBPC](#)
[Attachment 1 - Summary of Lodging Interviews](#)
[Items Handed Out at Meeting](#)

- 6B. [16-111](#)** Receive Report and Provide Direction to Staff Regarding Use of Electric Personal Assistive Mobility Devices on the Fort Bragg Coastal Trail

Attachments: [03282016 EPAMDs on the Coastal Trail](#)
[Attachment 1 - FBMC Chapter 9.68](#)
[Attachment 2 - Examples of EPAMDs](#)
[Attachment 3 - Cal Vehicle Code 21280 et seq](#)

4B. PUBLIC COMMENTS ON NON-AGENDA, CONSENT CALENDAR & CLOSED SESSION ITEMS (30 Minutes, If Necessary)

See 4A. above.

7. CONSENT CALENDAR

All items under the consent calendar will be acted upon in one motion unless a Councilmember requests that an individual item be taken up under CONDUCT OF BUSINESS

- 7A. [16-094](#) Authorize City Manager to Execute a Grant of License Permitting the Placement of Steps in the Public Right of Way in front of 144 East Laurel Street

Attachments: [Grant of License 144 East Laurel Street](#)

- 7B. [16-103](#) Adopt Joint City Council/Municipal Improvement District No. 1 Resolution Amending the FY 2015/16 Budget for Mid-Year Budget Adjustments

Attachments: [RESO Mid-Year Budget Adjustments](#)
[Exhibit A - Mid-Year Budget Adjustments](#)

- 7C. [16-096](#) Accept Certificate of Completion with Granite Construction for the Fort Bragg Coastal Restoration and Trail Project, Project No. 2014-01

Attachments: [Coastal Trail Certificate of Completion Signed](#)

- 7D. [16-110](#) Approve Minutes of Special Meeting of March 10, 2016

Attachments: [CCM2016-03-10 Special](#)

- 7E. [16-105](#) Approve Minutes of March 14, 2016

Attachments: [CCM2016-03-14](#)

8. CLOSED SESSION

ADJOURNMENT

The adjournment time for all Council meetings is no later than 10:00 p.m. If the Council is still in session at 10:00 p.m., the Council may continue the meeting upon majority vote.

NEXT REGULAR CITY COUNCIL MEETING: 6:00 P.M., MONDAY, APRIL 11, 2016

STATE OF CALIFORNIA)
)ss.
COUNTY OF MENDOCINO)

I declare, under penalty of perjury, that I am employed by the City of Fort Bragg and that I caused this agenda to be posted in the City Hall notice case on March 23, 2016.

Brenda Jourdain, Administrative Assistant

NOTICE TO THE PUBLIC:

DISTRIBUTION OF ADDITIONAL INFORMATION FOLLOWING AGENDA PACKET DISTRIBUTION:

- *Materials related to an item on this Agenda submitted to the Council/District/Agency after distribution of the agenda packet are available for public inspection in the lobby of City Hall at 416 N. Franklin Street during normal business hours.*
- *Such documents are also available on the City of Fort Bragg's website at <http://city.fortbragg.com> subject to staff's ability to post the documents before the meeting.*

ADA NOTICE AND HEARING IMPAIRED PROVISIONS:

It is the policy of the City of Fort Bragg to offer its public programs, services and meetings in a manner that is readily accessible to everyone, including those with disabilities. Upon request, this agenda will be made available in appropriate alternative formats to persons with disabilities.

If you need assistance to ensure your full participation, please contact the City Clerk at (707) 961-2823. Notification 48 hours in advance of any need for assistance will enable the City to make reasonable arrangements to ensure accessibility.

The Council Chamber is equipped with a Wireless Stereo Headphone unit for use by the hearing impaired. The unit operates in conjunction with the Chamber's sound system. You may request the Wireless Stereo Headphone unit from the City Clerk for personal use during the Council meetings.

This notice is in compliance with the Americans with Disabilities Act (28 CFR, 35.102-35.104 ADA Title II).



City of Fort Bragg

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Phone: (707) 961-2823
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Text File

File Number: 16-097

Agenda Date: 3/28/2016

Version: 1

Status: Mayor's Office

In Control: City Council

File Type: Proclamation

Agenda Number: 1A.

Presentation of Proclamation Declaring April 2016 as "Child Abuse and Neglect Prevention Month"

PROCLAMATION

Declaring April 2016 to be “Child Abuse and Neglect Prevention Month”

WHEREAS, child abuse and neglect are complex and ongoing problems in our society, affecting many children on the Mendocino Coast; and

WHEREAS, every child is entitled to be loved, cared for and nurtured, to feel secure and to be free from verbal, sexual, emotional and physical abuse, and neglect; and

WHEREAS, it is the responsibility of every adult who comes in contact with a child to protect that child's inalienable right to a safe and nurturing childhood; and

WHEREAS, the Mendocino Coast has many dedicated individuals and organizations who work daily to counter the problem of child maltreatment and to help parents obtain the assistance they need; and

WHEREAS, our communities are stronger when all citizens are aware of child maltreatment prevention and become involved in supporting parents to raise their children in a safe and nurturing environment; and

WHEREAS, effective child abuse prevention programs succeed because of partnerships among families, social service agencies, schools, religious and civic organizations, law enforcement agencies and the business community; and

WHEREAS, all citizens, community agencies, faith organizations, and businesses are encouraged to work to increase their efforts to support children and families.

NOW, THEREFORE, I, Dave Turner, Mayor of the City of Fort Bragg, on behalf of the entire City Council, do hereby proclaim the month of April 2016 to be CHILD ABUSE AND NEGLECT PREVENTION MONTH.

SIGNED this 28th day of March, 2016

DAVE TURNER, Mayor

ATTEST:

June Lemos, City Clerk

No. 05-2016



City of Fort Bragg

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Text File

File Number: 16-100

Agenda Date: 3/28/2016

Version: 1

Status: Mayor's Office

In Control: City Council

File Type:
Recognition/Announcements

Agenda Number: 1B.

Presentation by Leadership Mendocino Executive Director Heidi Cusick Dickerson and 2015
Scholarship Recipients



LEADERSHIP

M E N D O C I N O

A program of



Mission

Our mission is to identify and develop a diverse group of community leaders who will help create a spirit of county-wide cooperation and commitment for the resolution of current and future community issues

Ten-month Program

August	Reception & Orientation
September	Class Retreat - Overnight
October	Natural Resources
November	Government, Emergency Services
December	Health Services, Disaster training
January	Business, Finances, Economy
February	Education
March	Agriculture
April	Covelo, Round Valley
May	Arts & Tourism

Orientation



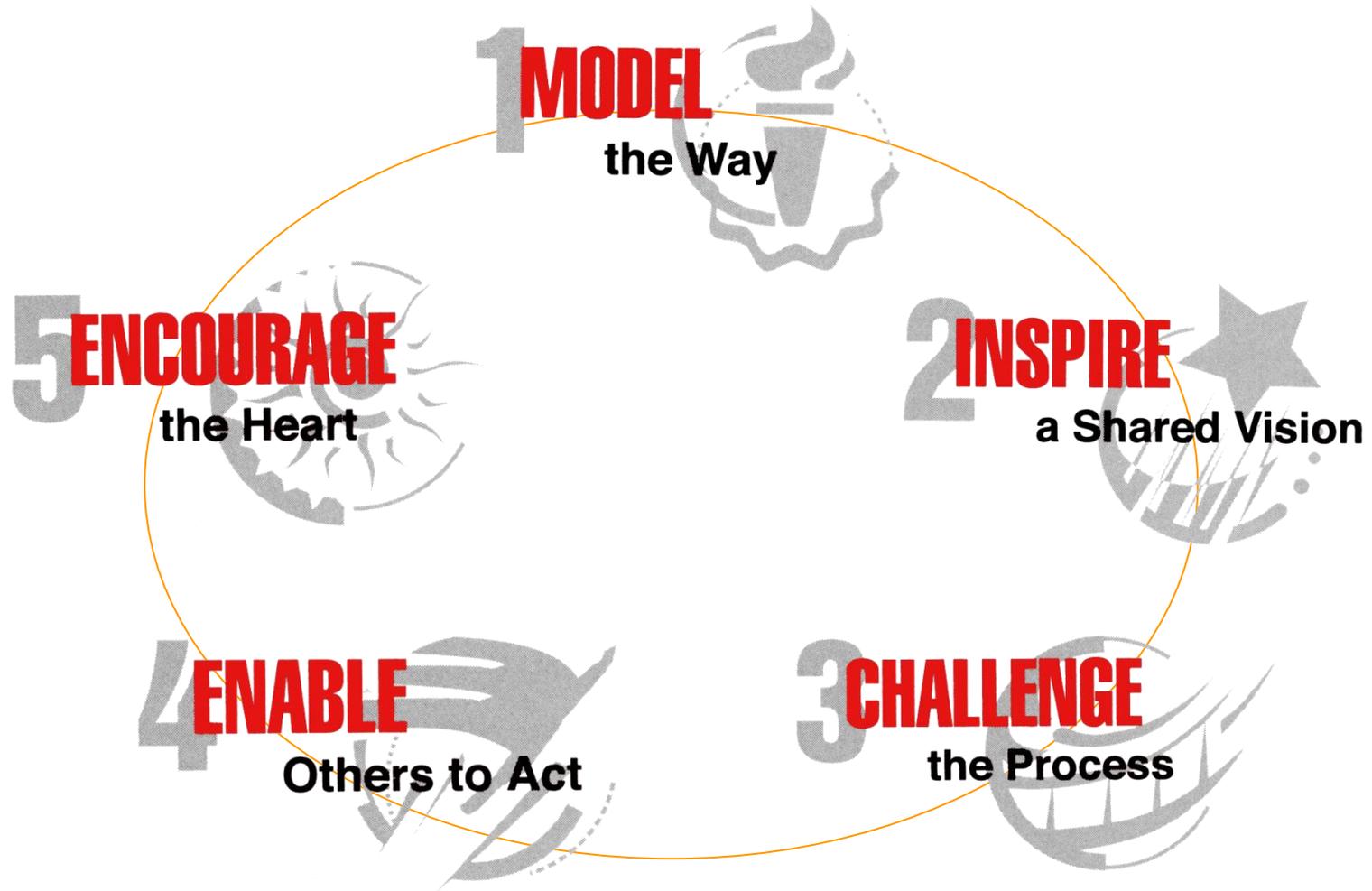
Leadership Mendocino Class XXIII





Access to a huge network of existing leaders

The Five Practices of Exemplary Leadership[®]



Team building!



We inform, challenge and educate participants on issues and opportunities in our communities



Natural Resources Day

Timber Practices & Stream Restoration



Government Day panel presentations



Mock Supervisors Meeting





Health and Wellness Day at new Howard Hospital

Agriculture Day hands on experiences



Agricultural Day with Family Farmers



Education Class Day Fort Bragg



Fort Bragg Student leaders



Noyo Food Forest Tour

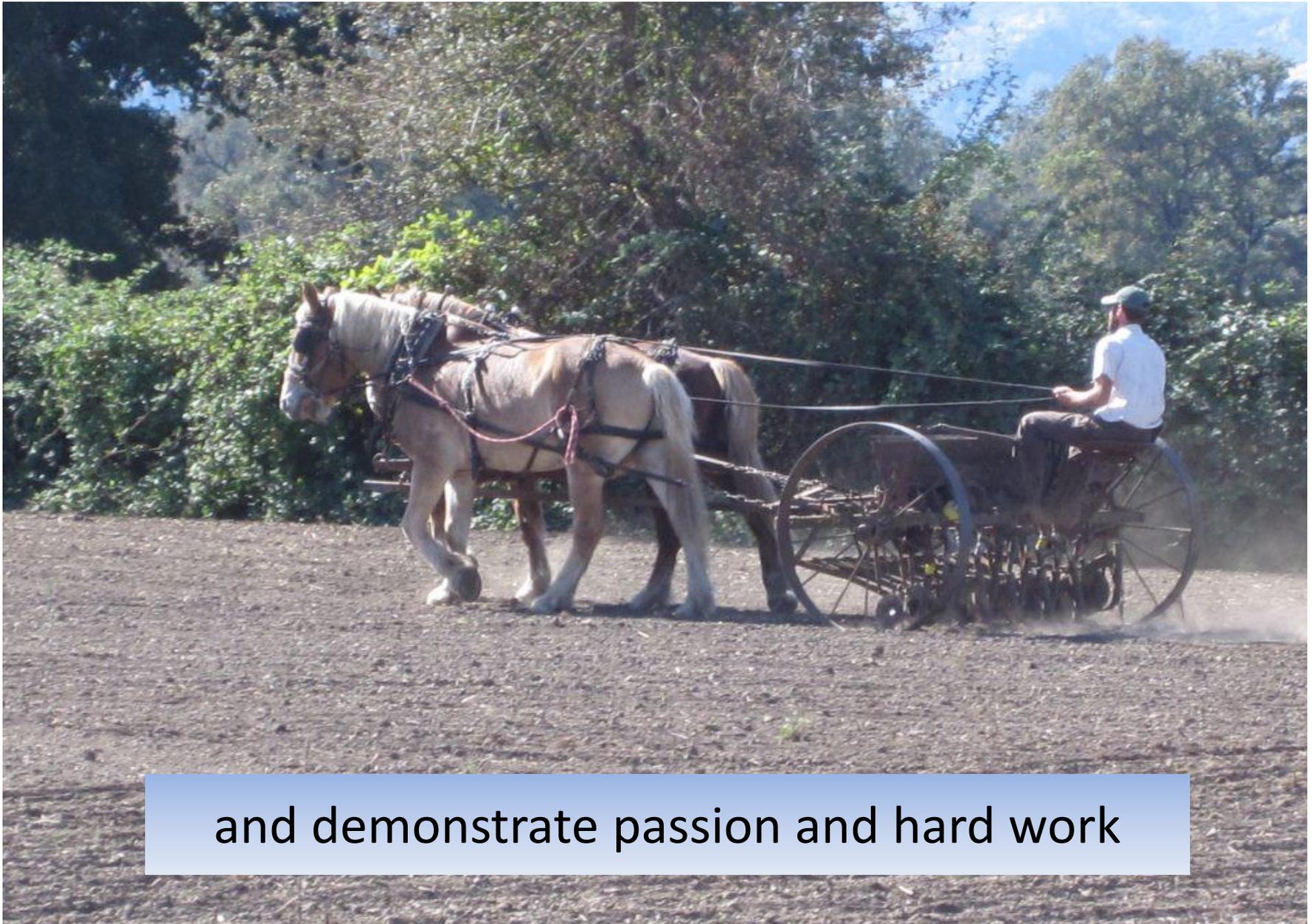


Sheila Semans talks about the Noyo Center



We demonstrate leadership in action
all across Mendocino County.





and demonstrate passion and hard work

We develop the spirit of commitment by requiring a community project



Volunteer Income Tax Assistance

Go with VITA! (We'll do your taxes for free)

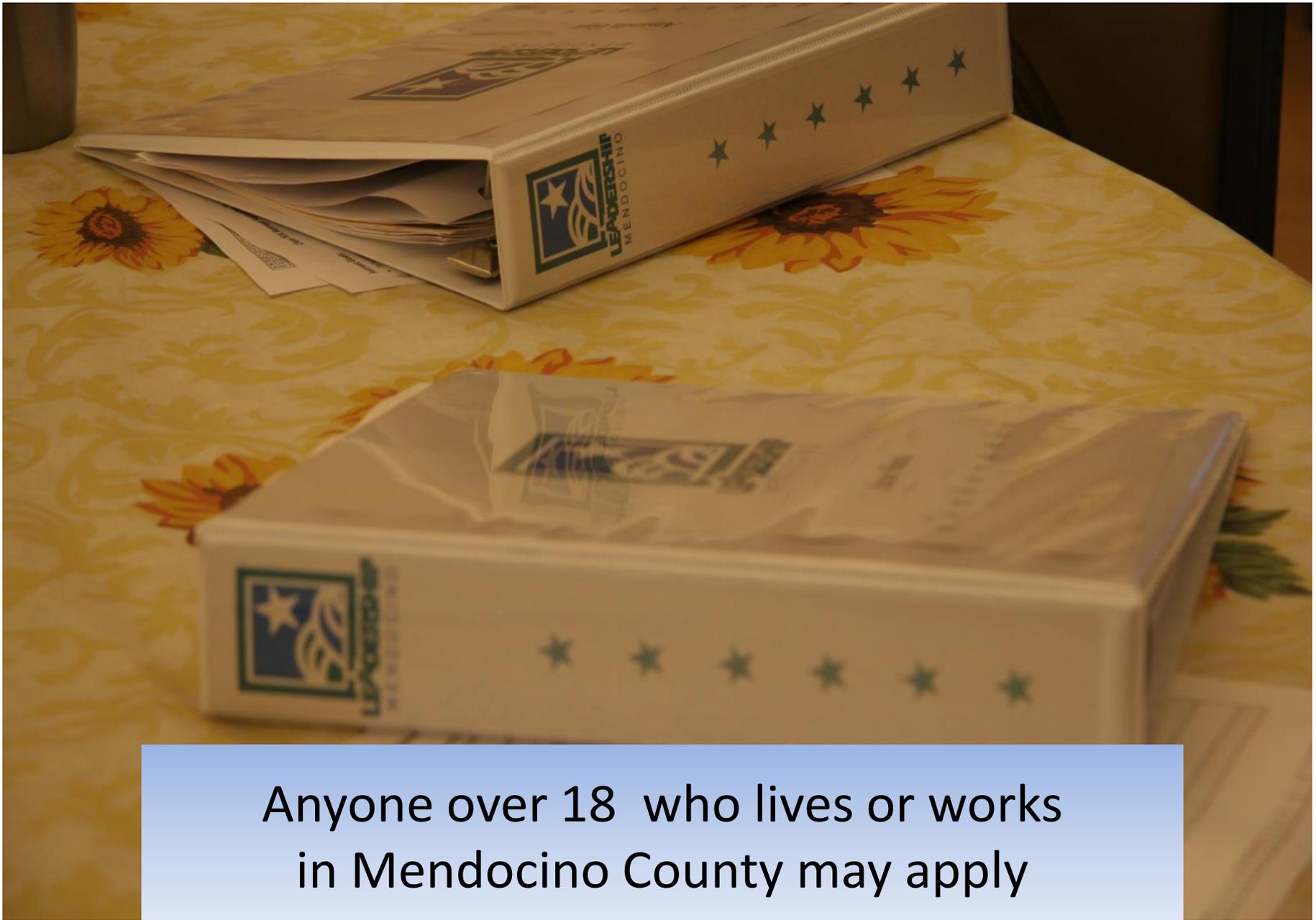


Positions on Boards

- MCAVHN
- North Coast Opportunities
- Mendocino County Mental Health Board
- Ukiah Women in Business Network
- North Coast Women in Business Network
- Jere Melo Foundation
- Boys and Girls Club of Ukiah
- Project Sanctuary

Celebrating our 23rd Anniversary

- Founded in 1992
- Started with Funding from PG&E
- Class XXIII Currently in Session
- Annual budget of \$75,000



Anyone over 18 who lives or works
in Mendocino County may apply

565 Graduates so far . . .and a new Alumni Association



More than 100 businesses, organizations and agencies have sent employees through the program

Class days are long and full



Thank you to our

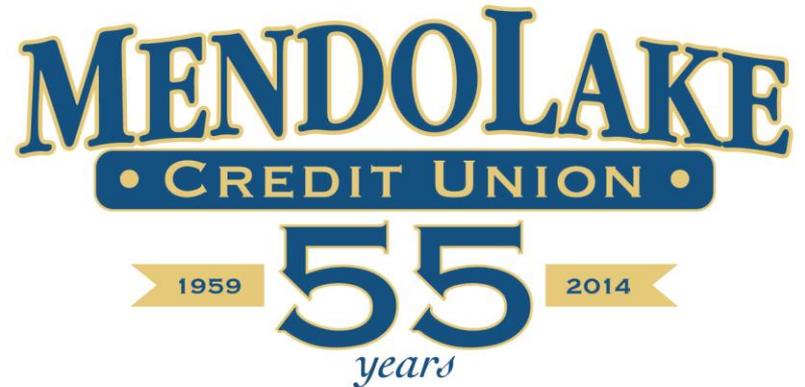
Circle of Leaders



Savings Bank
OF MENDOCINO COUNTY
Member FDIC



FORT BRAGG
On California's Spectacular Mendocino Coast





LEADERSHIP
MENDOCINO



City of Fort Bragg

416 N Franklin Street
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Text File

File Number: 16-090

Agenda Date: 3/28/2016

Version: 1

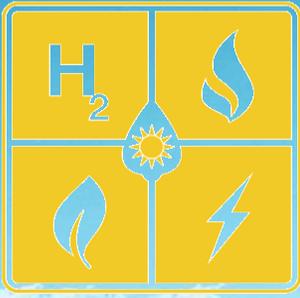
Status: Mayor's Office

In Control: City Council

File Type:
Recognition/Announcements

Agenda Number: 1C.

Receive Presentation Regarding the Northwest California Alternative Fuels Readiness Plan (AFRP) Project



Northwest California Alternative Fuels Readiness Project



The Northwest California Alternative Fuels Readiness Project is developing a readiness plan for the counties of Del Norte, Siskiyou, Humboldt, Trinity, and Mendocino.

Focus on the Future

- Create a roadmap for wise and effective alternative fuel infrastructure deployment.
- Identify activities that encourage regional alternative fuel vehicle adoption.
- Coordinate regional efforts that support the successful introduction of alternative fuel vehicles.
- Highlight training and first responder needs for safe deployment and adoption.
- Facilitate robust market development for alternative fuels.

Promote Economic Development

To address multiple barriers to alternative transportation fuel adoption in the region, this project:

- Promotes the need for alternative fuel infrastructure;
- Encourages the use of locally processed fuels;
- Informs consumers about alternative fuels;
- Addresses permitting and regulatory hurdles with local and regional government agencies;
- Engages local and regional fleets about alternative fuel conversion opportunities.

Project Partners

This is a cooperative effort between the Redwood Coast Energy Authority, the Schatz Energy Research Center at Humboldt State University, the Mendocino Council of Governments, the North Coast Unified Air Quality Management District, and the Siskiyou County Economic Development Council. Funding is provided by the California Energy Commission under grant number ARV-13-012.



Change More Than Just the Car You Drive

Through accelerated commercialization of alternative and renewable fuels, this project not only ensures the region meets its share of the State's low carbon fuel standard, but also improves air quality, encourages energy sustainability, and improves regional resilience to natural disasters.



Align with State Goals

The State of California has set ambitious goals for adopting alternative fuels. Through the State Alternative Fuels Plan (AB 1007), current State policy is to:

- Transition away from petroleum consumption via AB 1076 and the *Reducing California's Petroleum Dependence* plan;
- Reduce greenhouse gas emissions through AB 32 and adoption of the low carbon fuel standard;
- Increase in-state biofuel production and use through the *Bioenergy Action Plan for California*;
- Improve air quality through state mandates set by the California Air Resources Board.

The Northwest California Alternative Fuels Readiness Project promotes State goals by assessing the opportunity to commercialize and adopt low carbon fuels in the unique setting of the Northwest Region. The project also integrates local needs and challenges into a strategic planning and outreach effort that effectively enhances the adoption of alternative fuels.

Clean, Sustainable, and Secure

Fuels that are cleaner than gasoline or diesel can be sourced within the United States, and in our region, to facilitate a more secure energy future. Fuels under consideration are **electricity, natural gas and propane, hydrogen, and biofuels such as biodiesel and biogas.**

Project Stakeholder Input Is Needed

Numerous stakeholders will have a voice in this project, including:

- Local governments
- Fuel producers and distributors
- Emergency responders
- Fleet operators
- Auto dealers
- Many others

Stakeholder Outreach Timeline

- | | | | |
|---|---------------------------|--------|--------|
| | ● 2014 | ● 2015 | ● 2016 |
| • Assess alternative fuel infrastructure and deployment options (including an assessment of planning, permitting and deployment challenges) | April 2014 - August 2015 | | |
| • Analyze and recommend incentives to increase alternative fuel adoption | May 2014 - June 2015 | | |
| • Develop strategic plan for alternative fuel market development | August 2014 - June 2015 | | |
| • Cooperatively develop training materials for infrastructure owners, operators, managers, and emergency response teams | May 2015 - November 2015 | | |
| • Create outreach materials and strategies to communicate alternative fuel benefits | July 2015 - December 2015 | | |
| • Develop and finalize a regional readiness plan | July 2015 - October 2015 | | |

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EnergyAuthority

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info@redwoodenergy.org
www.RedwoodEnergy.org

The Future is Now!

Planning for Low Carbon Transportation Fuels in Northern California



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Northwest California Alternative Fuels Readiness Plan



REDWOOD COAST
Energy Authority



SCHATZ
ENERGY
RESEARCH
CENTER



SISKIYOU COUNTY
ECONOMIC DEVELOPMENT

California's Northwest Region



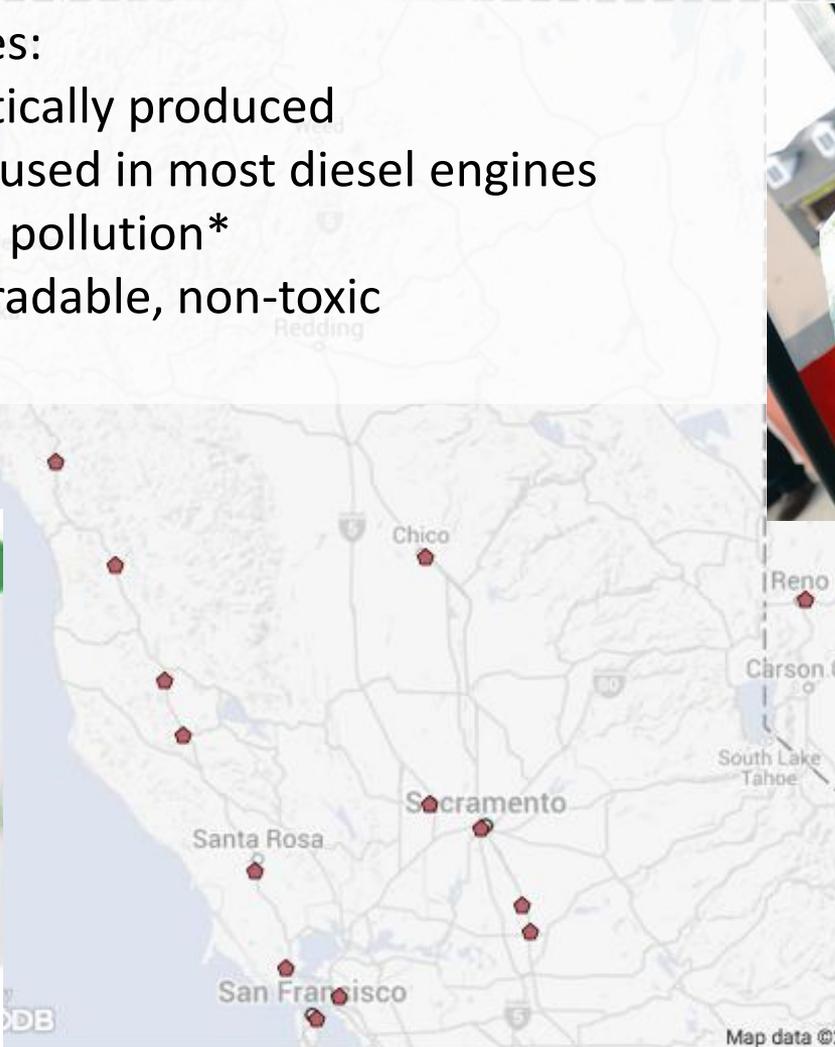
What Are Alternative Fuels?

- Biodiesel
 - Renewable Diesel
 - Ethanol
 - Natural gas & Renewable Natural Gas
 - Propane
 - Electricity
 - Hydrogen
- Zero Emissions vehicles

Overview of Fuels – Biodiesel

Advantages:

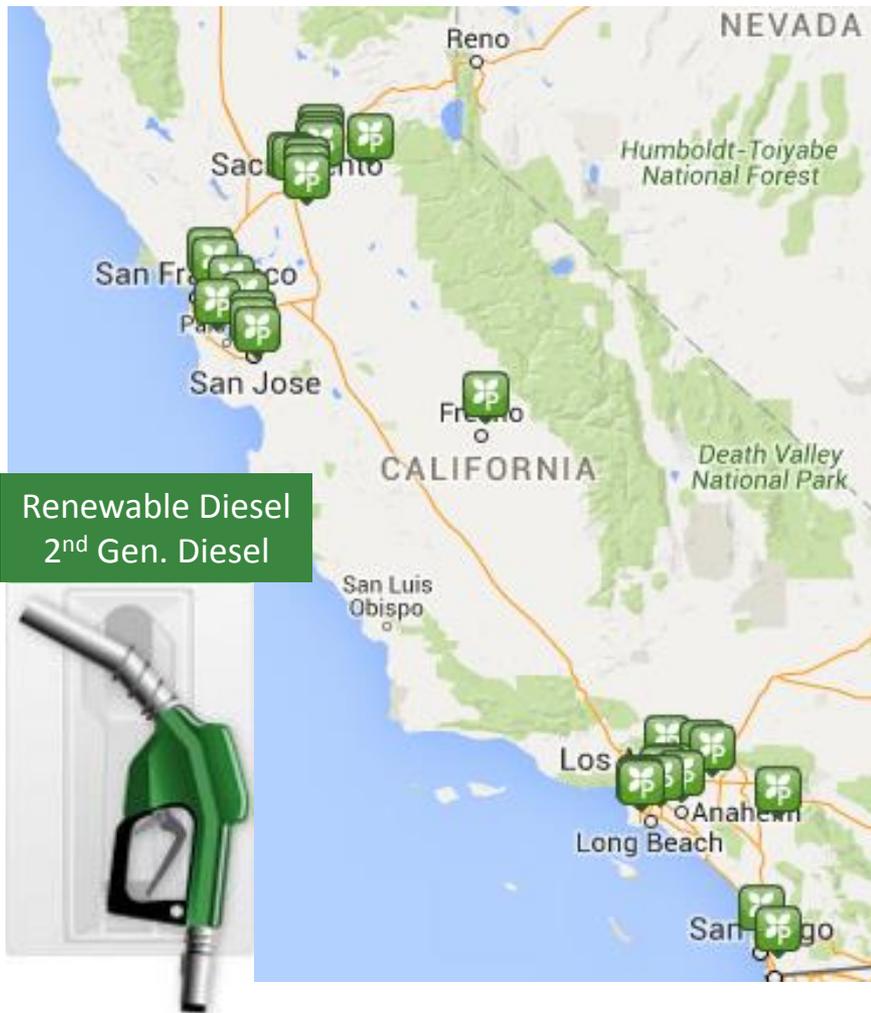
- Domestically produced
- Can be used in most diesel engines
- Less air pollution*
- Biodegradable, non-toxic



Disadvantages:

- Lower fuel economy / power (10% for B100, 2% for B20)
- Currently more expensive
- B100 not suitable in low temps.
- Potential engine issues
- Land use impacts

Overview of Fuels – Renewable Diesel



Advantages:

- Drop-in fuel for all diesel vehicles
- Can be domestically produced from renewable resources
- Less air pollutants
- Less greenhouse gas emissions

Disadvantages: Land use impacts

Overview of Fuels – Ethanol

ATTENTION
E15
Up to 15% ethanol

Use only in

- 2001 and newer passenger vehicles
- Flex-fuel vehicles

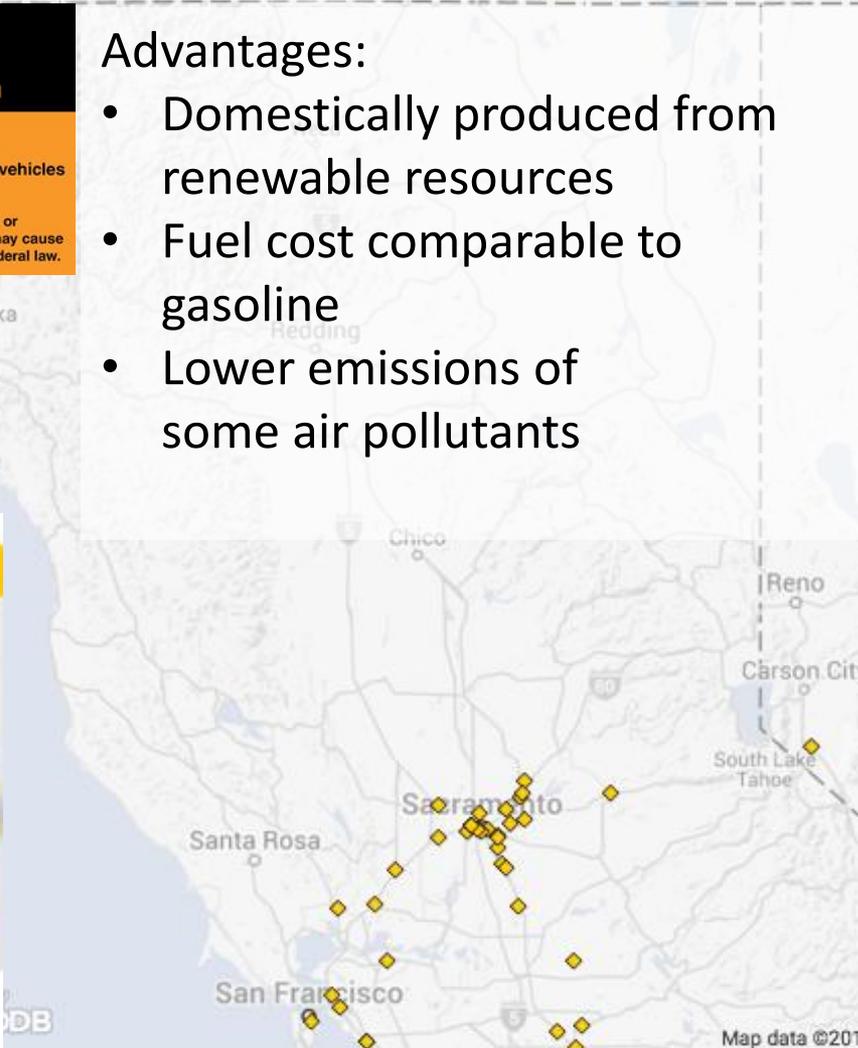
Don't use in other vehicles, boats or gasoline-powered equipment. It may cause damage and is *prohibited* by Federal law.

Advantages:

- Domestically produced from renewable resources
- Fuel cost comparable to gasoline
- Lower emissions of some air pollutants

Disadvantages:

- Flex-fuel vehicle required for higher blends above 15%
- Lower energy content than gasoline = lower fuel economy
- Land use impacts



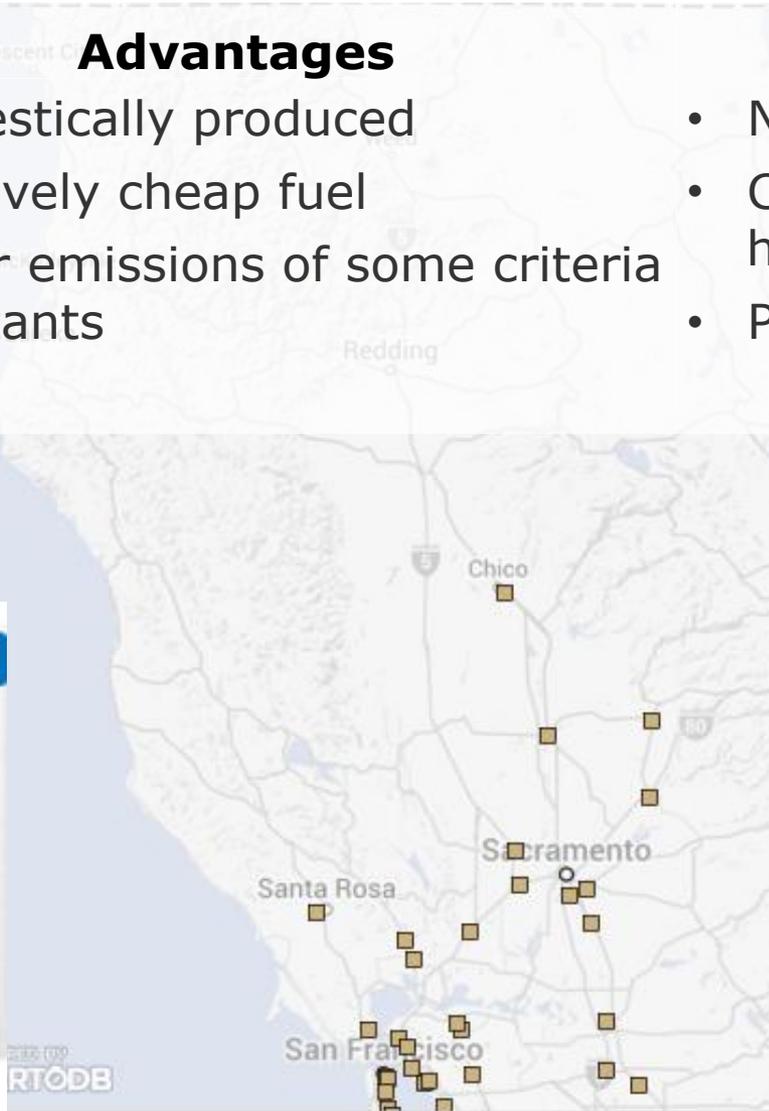
Overview of Fuels – Natural Gas

Advantages

- Domestically produced
- Relatively cheap fuel
- Fewer emissions of some criteria pollutants

Disadvantages

- Non-renewable fuel source
- CNG vehicles primarily limited to heavy duty sector
- Potentially higher GHG emissions



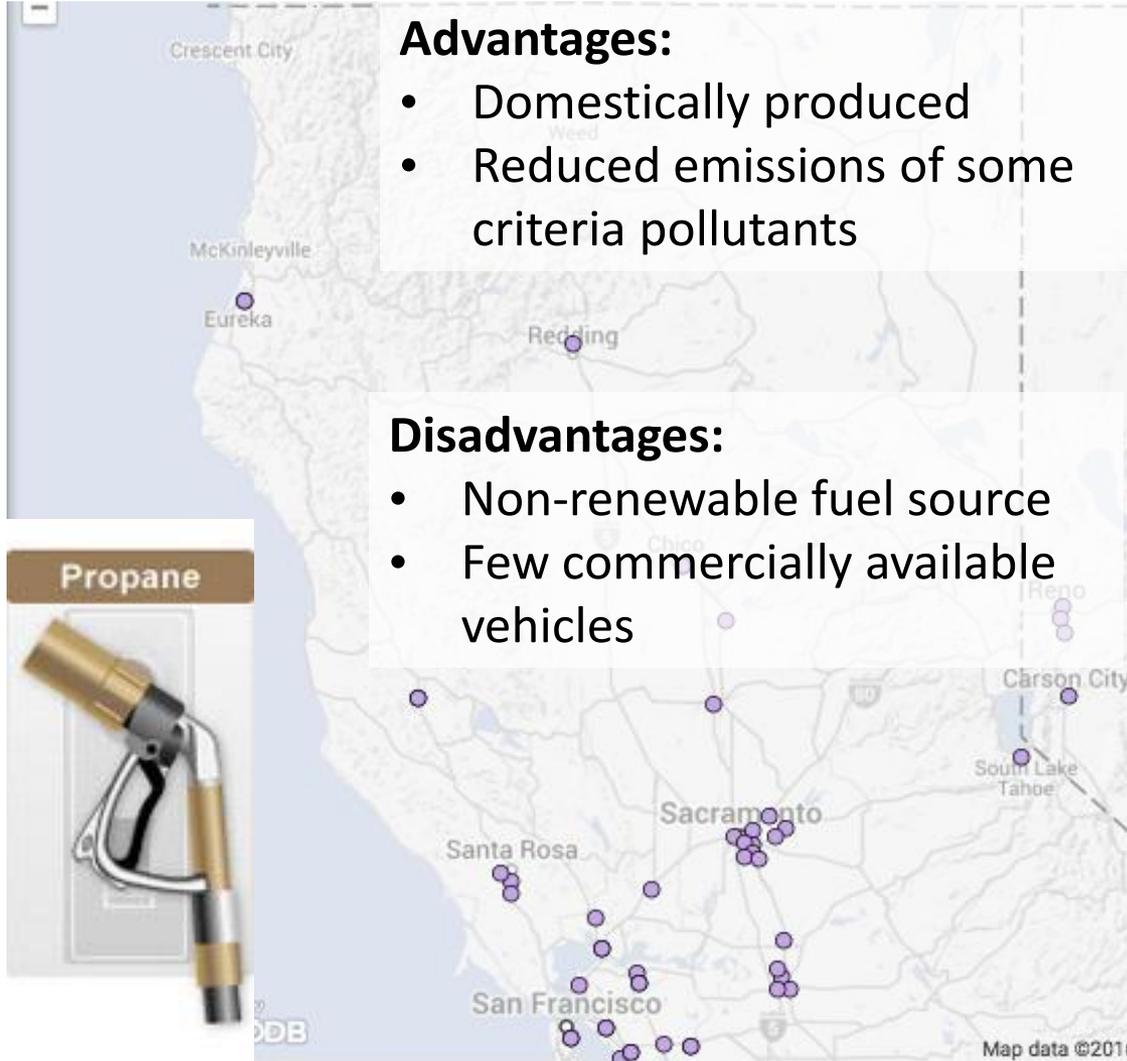
Overview of Fuels – Propane (Liquefied Petroleum Gas)

Advantages:

- Domestically produced
- Reduced emissions of some criteria pollutants

Disadvantages:

- Non-renewable fuel source
- Few commercially available vehicles



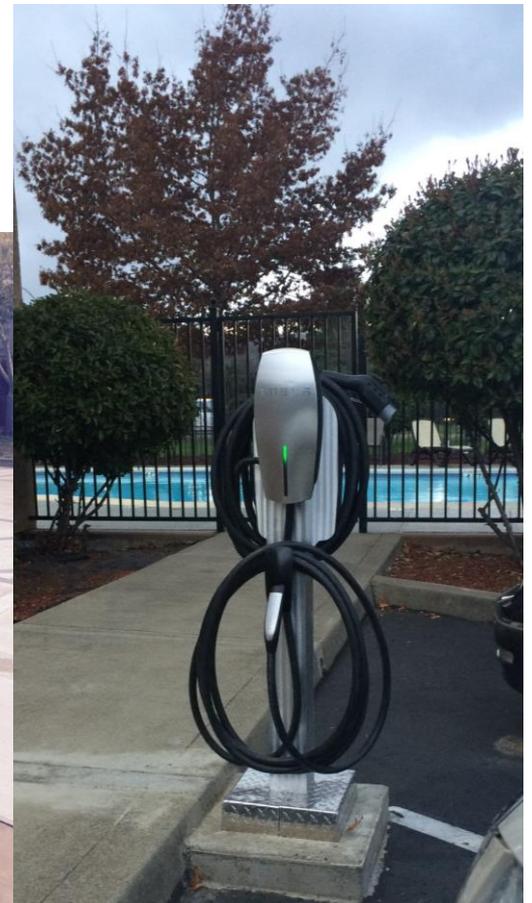
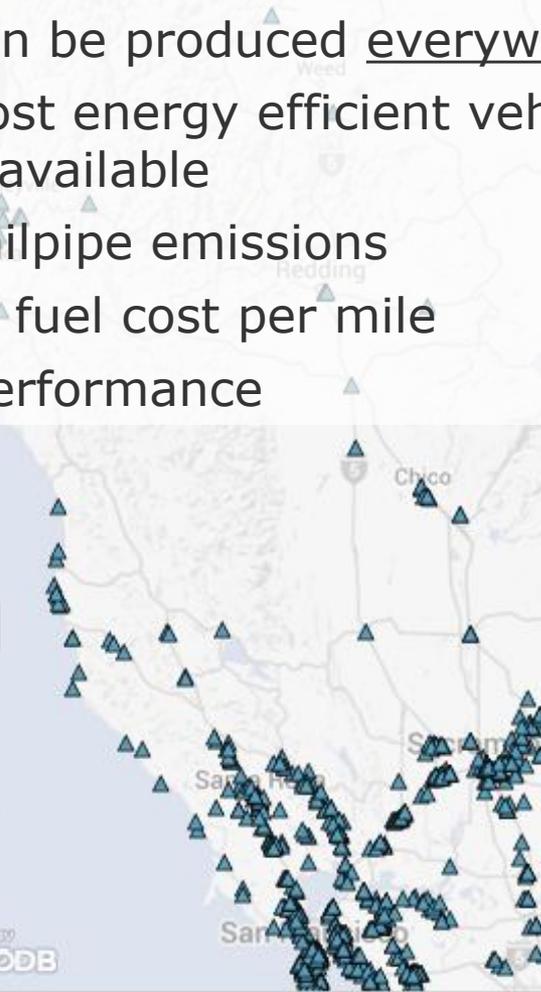
Overview of Fuels – Electricity

Advantages:

- Fuel can be produced everywhere
- The most energy efficient vehicle option available
- Zero tailpipe emissions
- Lowest fuel cost per mile
- High performance

Disadvantages:

- Driving range
- Recharge time



Overview of Fuels – Hydrogen

Advantages:

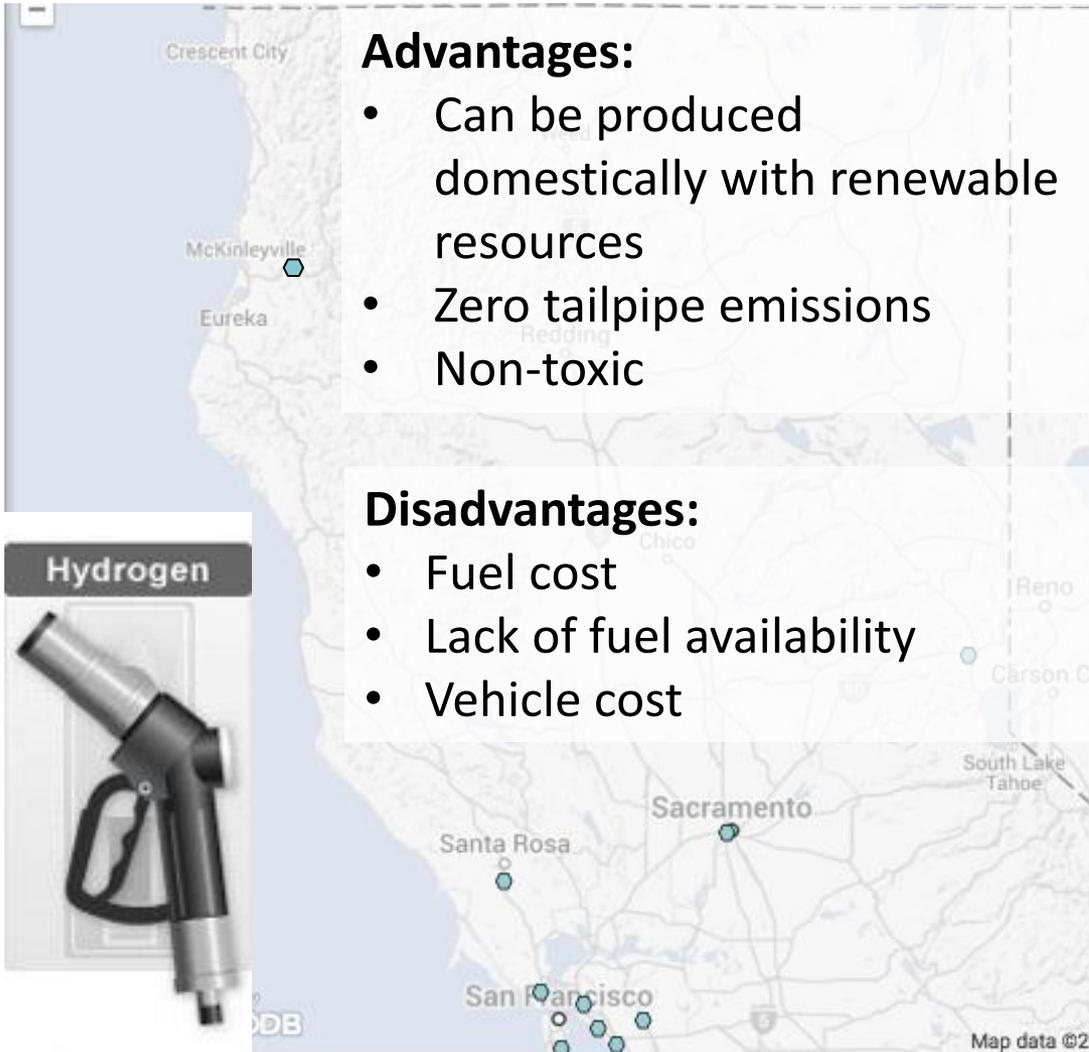
- Can be produced domestically with renewable resources
- Zero tailpipe emissions
- Non-toxic

Disadvantages:

- Fuel cost
- Lack of fuel availability
- Vehicle cost

California H2 Fuel goals:

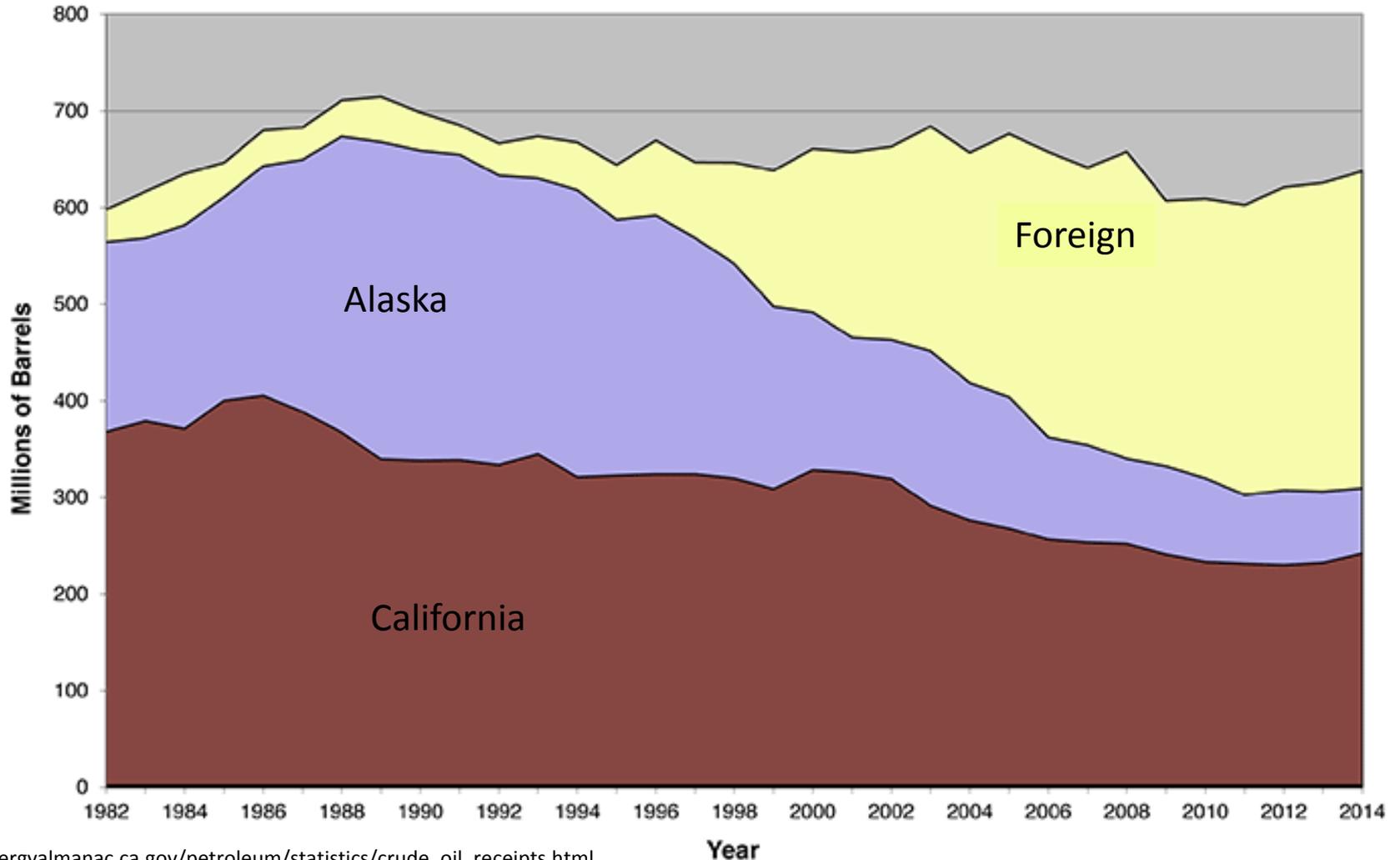
- 51 stations by 2016
- 86 stations by 2021



Why Alternative Fuels?

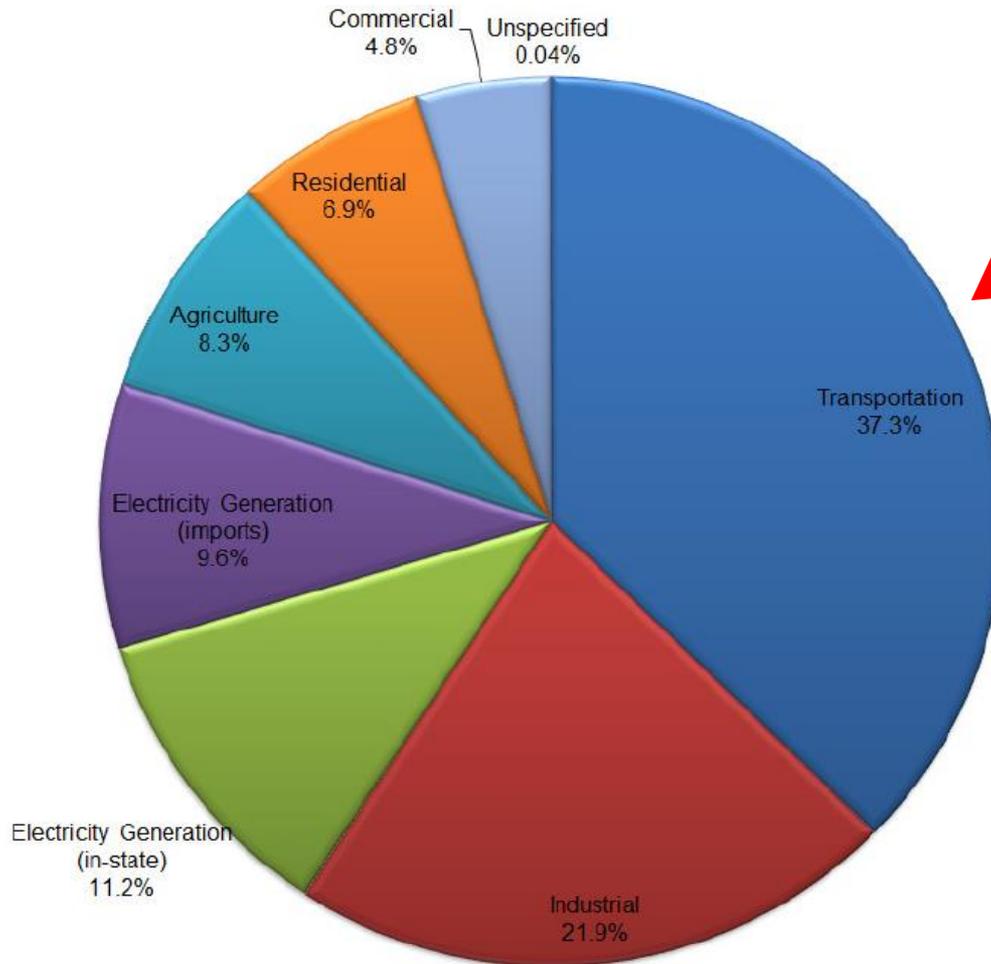
Energy Security

Crude Oil Supply Sources to California Refineries



Why Alternative Fuels?

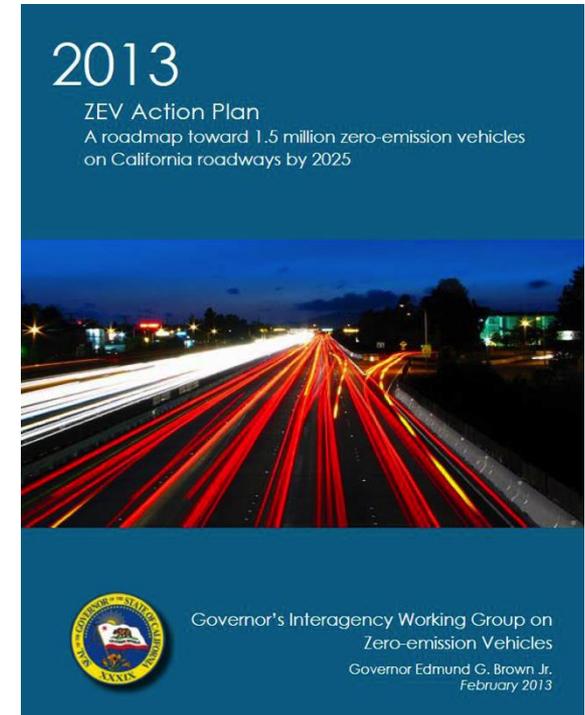
GHG Reduction



Transportation accounts for 37% of CA greenhouse gas emissions

CA Zero Emission Vehicles Goals & Policies

- Increase use of fuels produced in CA
 - Reduce dependency on petroleum
 - Increase energy security
- Improve air quality
- Reduce GHG emissions



CA Mandates & Standards

- **CA Low Carbon Fuel Standard (LCFS)**
 - 10% reduction in carbon intensity of CA fuel mix by 2020
- **Title 24: 2013 Building Codes**
 - EV Charging infrastructure requirements
- **Mobile Source Emissions Reductions Requirements**
- **State Agency Low Carbon Fuel Use Requirement**
 - 10% of all state fuel purchases must be low-carbon fuels
- **State Vehicle Petroleum Reduction Requirements**
 - 20% reduction in state consumption of petroleum by 2020
- **Zero Emission Vehicle Production requirement**
 - 20% of new vehicles sold in 2025 will be ZEVs



Federal Incentives & Standards

- **1975 Corporate Average Fuel Economy (CAFE) standards**
- **1992 Energy Policy Act**
 - Required state, federal, and alternative fuel providers to establish an inventory of Alternative Fuel Vehicles
- **2005 Energy Policy Act**
 - Established grants & tax incentives to promote use of alternative fuels and advanced vehicle technologies
- **2007 Energy Independence and Security Act**
 - Set **Renewable Fuels Standard** to increase U.S. supply of renewable fuel
 - Increased CAFE standard to 35mpg by 2020 for passenger cars and trucks



Why should local Gov't care?

➤ **Local energy security**

- Reduce vulnerability to fuel price volatility

➤ **Economic development**

- New types of parts, equipment, and maintenance will be needed
- Reduce outflow of money from petroleum sales

➤ **Municipal fleet operations benefits**

- Achieve compliance with emissions standards
- Reduce operating costs



What can local Gov'ts do?

- Plan for alternative fuel infrastructure
 - Include language in General Plan updates
 - Update zoning & building codes
- Add alternative fuel vehicles to municipal fleet
 - Accelerate retirement of older engines
- Become a regional Clean Cities Coalition partner



Northwestern CA

Clean Cities Coalition

- U.S. Department of Energy program
 - Resources for local alternative fuels infrastructure development
 - Alternative fuel vehicle training programs
- Looking for regional partners to:
 - Provide input on plans for alternative fuels in the region
 - Collaborate on funding applications to meet common goals
 - Establish a regional EV charging network
 - Increase availability of Renewable Diesel and biofuels



Thank You!

Redwood Coast Energy Authority (RCEA)

RedwoodEnergy.org

Schatz Energy Research Center (SERC)

SchatzLab.org



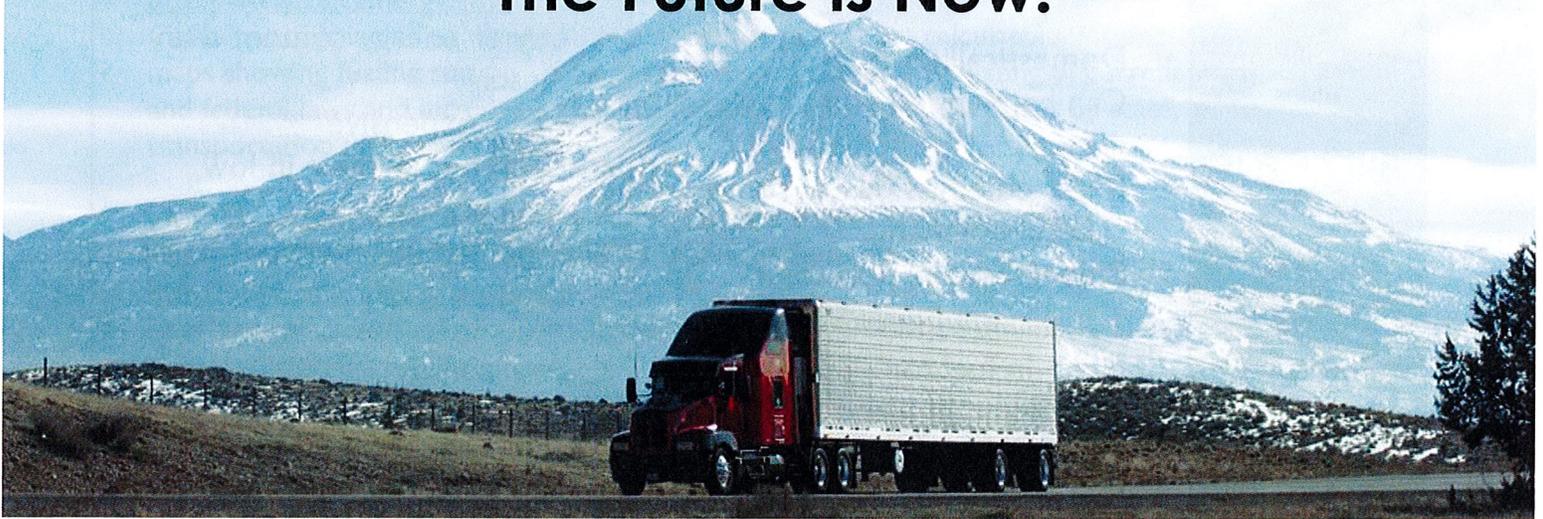
For more information contact:

Jerome Carman, SERC

CANorthStateCleanCities@gmail.com

Alternative Fuels & Fleets

The Future is Now!



The future of transportation in California will be characterized by a diversity of low-emissions fuels and high performance vehicle and engine technologies.

This toolkit is designed to prepare fleet operators in the North State California region for changes in the transportation sector by providing information about:

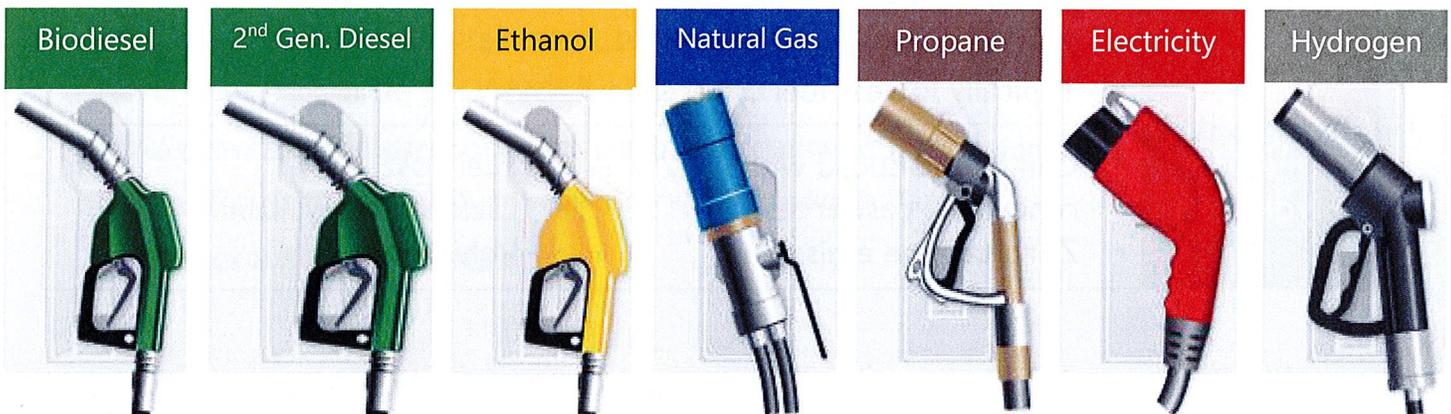
- Alternative fuels
- Clean vehicle technologies on the market
- Available state and federal incentives
- Fleet conversion impact and cost calculators
- Guidelines for developing a fleet conversion plan

The benefits of using alternative fuels include:

- Potential to reduce fleet operating costs: fuel, maintenance, and insurance
- Increased energy and price security through use of domestically produced fuels
- Compliance with current and future California air emissions standards

Alternative fuels are:

- Biofuels made from plants - biodiesel, renewable (2nd Gen.) diesel, & ethanol
- Domestic gaseous fuels - natural gas & propane
- Zero-emissions fuels - electricity & hydrogen



USEFUL CLEAN FLEET RESOURCES



- 1.) **U.S. Department of Energy Alternative Fuels Data Center**
<http://www.afdc.energy.gov/>
Contains tools including: fleet emissions and operating cost calculators, interactive maps showing fueling stations & truck stop electrification sites, listing of current state and federal laws and incentives, fuel properties comparison, fuel prices by state, and other transportation fuel related data.
- 2.) **U.S. Department of Energy Alternative Fuels Data Center: Alternative Fuel and Advanced Vehicle Search**
<http://www.afdc.energy.gov/vehicles/search>
User can select and see the types of alternative fuel vehicles on the market based on fuel type, vehicle class, and manufacturer.
- 3.) **California Air Resources Board Buying Guide for Clean and Efficient vehicles**
http://driveclean.ca.gov/Find_Special_Resources/Fleets.php
Search for clean vehicles on the market and sort for incentives by technology type and zip code.
- 4.) **West Coast Electric Fleets**
<http://www.westcoastelectricfleets.com/>
Provides case studies, tools, and technical assistance to help fleet managers reduce costs by incorporating electric and/or hydrogen vehicles into their fleets.
- 5.) **Trucking Efficiency**
<http://www.truckingefficiency.org/>
Information on all available efficiency technologies and best practices for tractor-trailer fleet operators.
- 6.) **Fleet and Fuels**
<http://www.fleetsandfuels.com/>
Links to current news articles and case studies for Biodiesel, Electric, Ethanol, Hybrids, Hydrogen, Natural Gas and Propane fuels.
- 7.) **California Air Resources Board Draft Technology Assessment: Medium-and Heavy-duty Battery Electric Trucks and Buses (2015)**
http://www.arb.ca.gov/msprog/tech/techreport/bev_tech_report.pdf
Report includes: transit buses, school buses, medium-duty trucks, shuttle buses, and heavy-duty trucks. Covers electric vehicle component specifications, charging system requirements, vehicle costs and payback periods, emissions benefits and optimal duty cycle.
- 8.) **Regional Zero Emissions Vehicle Readiness Plans:**
Mendocino County Zero Emissions Vehicle (ZEV) Regional Readiness Plan -
http://www.mendocinocog.org/reports_projects.shtml
North Coast Plug-in Electric Vehicle Readiness Plan -
<http://www.redwoodenergy.org/index.php/transportation/ev-readiness-planning>
Siskiyou County (Upstate) Plug-in Electric Vehicle Readiness Plan -
<http://www.siskiyoucounty.org/pev/>

Overview of Alternative Fuels

Fuel	Advantages	Disadvantages
Biodiesel	<ul style="list-style-type: none"> Domestically produced Can be blended in most diesel engines Reduced emissions of some criteria pollutants Biodegradable, non-toxic 	<ul style="list-style-type: none"> Lower energy content than diesel More expensive B100 not suitable in low temperatures Potential engine issues if not used properly
Renewable Diesel	<ul style="list-style-type: none"> Drop-in fuel for <u>all</u> diesel vehicles at <u>all</u> blend levels up to 100% Can be domestically produced from renewable resources Reduced emissions 	<ul style="list-style-type: none"> Availability Potential land use impacts, although currently most feedstocks are waste products such as cooking oil or beef tallow
Ethanol	<ul style="list-style-type: none"> Domestically produced from renewable resources Fuel cost comparable to gasoline Lower emissions of some air pollutants 	<ul style="list-style-type: none"> Flex-fuel vehicle required for higher blends above 15% for 2001 model years or later Lower energy content Land use impacts, over 90% of ethanol produced from corn
Natural Gas	<ul style="list-style-type: none"> Domestically produced Relatively cheap fuel Fewer emissions of some criteria pollutants 	<ul style="list-style-type: none"> Non-renewable fuel Potentially higher greenhouse gas emissions from leaked methane
Propane	<ul style="list-style-type: none"> Domestically produced Reduced emissions of some criteria pollutants 	<ul style="list-style-type: none"> Non-renewable fuel Few commercially available vehicles
Electricity	<ul style="list-style-type: none"> Fuel can be produced <u>everywhere</u> The most energy efficient powertrain option available Zero tailpipe emissions Typically lowest fuel cost / mile 	<ul style="list-style-type: none"> Limited driving range Battery recharge time
Hydrogen	<ul style="list-style-type: none"> Can be produced with renewable resources Zero tailpipe emissions 	<ul style="list-style-type: none"> Fuel cost Lack of fuel availability Vehicle cost

USEFUL CLEAN FLEET RESOURCES



- 1.) **U.S. Department of Energy Alternative Fuels Data Center**
<http://www.afdc.energy.gov/>
Contains tools including: fleet emissions and operating cost calculators, interactive maps showing fueling stations & truck stop electrification sites, listing of current state and federal laws and incentives, fuel properties comparison, fuel prices by state, and other transportation fuel related data.
- 2.) **U.S. Department of Energy Alternative Fuels Data Center: Alternative Fuel and Advanced Vehicle Search**
<http://www.afdc.energy.gov/vehicles/search>
User can select and see the types of alternative fuel vehicles on the market based on fuel type, vehicle class, and manufacturer.
- 3.) **California Air Resources Board Buying Guide for Clean and Efficient vehicles**
http://driveclean.ca.gov/Find_Special_Resources/Fleets.php
Search for clean vehicles on the market and sort for incentives by technology type and zip code.
- 4.) **West Coast Electric Fleets**
<http://www.westcoastelectricfleets.com/>
Provides case studies, tools, and technical assistance to help fleet managers reduce costs by incorporating electric and/or hydrogen vehicles into their fleets.
- 5.) **Trucking Efficiency**
<http://www.truckingefficiency.org/>
Information on all available efficiency technologies and best practices for tractor-trailer fleet operators.
- 6.) **Fleet and Fuels**
<http://www.fleetsandfuels.com/>
Links to current news articles and case studies for Biodiesel, Electric, Ethanol, Hybrids, Hydrogen, Natural Gas and Propane fuels.
- 7.) **California Air Resources Board Draft Technology Assessment: Medium-and Heavy-duty Battery Electric Trucks and Buses (2015)**
http://www.arb.ca.gov/msprog/tech/techreport/bev_tech_report.pdf
Report includes: transit buses, school buses, medium-duty trucks, shuttle buses, and heavy-duty trucks. Covers electric vehicle component specifications, charging system requirements, vehicle costs and payback periods, emissions benefits and optimal duty cycle.
- 8.) **Regional Zero Emissions Vehicle Readiness Plans:**
Mendocino County Zero Emissions Vehicle (ZEV) Regional Readiness Plan -
http://www.mendocinocog.org/reports_projects.shtml
North Coast Plug-in Electric Vehicle Readiness Plan -
<http://www.redwoodenergy.org/index.php/transportation/ev-readiness-planning>
Siskiyou County (Upstate) Plug-in Electric Vehicle Readiness Plan -
<http://www.siskiyoucounty.org/pev/>

USEFUL CALCULATORS AND FLEET CONVERSION MODELS



1.) **U.S. Department of Energy Alternative Fuels Data Center: Vehicle Cost Calculator** ●

<http://www.afdc.energy.gov/calc/>

User can compare light-duty vehicles of all makes, models, and fuel types. User selects vehicles to compare and daily and annual driving distance. Output includes: annual fuel use, annual fuel cost, cost per mile, and annual CO₂ emissions for each vehicle.

2.) **Argonne National Labs Alternative Fuel Life-cycle Environmental and Economic Transportation Tool (AFLEET)** ●

<https://greet.es.anl.gov/afleet>

Useful for comparing fleet conversion options for light-duty and heavy-duty vehicles fueled by gasoline, diesel and most alternative fuels. User inputs include: number of vehicles, years of planned ownership, and loan terms. Model contains default values for annual vehicle mileage, fuel economy, vehicle purchase price, fuel cost, and fuel feedstock; these values can also be customized. Output includes: payback period, total cost of ownership, criteria air pollutant emissions and greenhouse gas emissions.

3.) **Petroleum Reduction Planning Tool** ●

<http://www.afdc.energy.gov/prep/>

Users can create a plan for reducing petroleum use by using several savings methods including: replacing vehicles, using alternative fuels, reducing idling, and changing driving habits. Calculator includes most car sizes, pickups, vans, SUVs, medium-duty trucks (14,000 – 26,000 lbs.), and heavy-duty trucks. Does not include: refuse trucks, buses, or other vehicles such as fire engines, ambulances, street sweepers etc. Input includes: petroleum reduction goal, number of vehicles, vehicle type, annual mileage, and idle time. Output includes: petroleum reduction / year, greenhouse gas emissions reductions / year, fuel cost savings / year, and impact on your fuel reduction plan.

4.) **CNG VICE 2.0: Vehicle Infrastructure Cash-Flow Evaluation Model** ●

http://www.afdc.energy.gov/vice_model/

This model can be used to evaluate conversion of fleet vehicles to compressed natural gas (CNG) vehicles. Vehicle types include: transit buses, school buses, refuse trucks, shuttle buses, delivery trucks, gasoline pickup trucks, and taxis. User inputs include: project type (vehicles only or vehicles + fuel infrastructure), vehicle data, and investment data (incentives, acquisition timeline, and number of vehicles converted by type). Output includes: payback period, quantity of petroleum fuel displaced, reduced greenhouse gas emissions, incremental cost increase, and total infrastructure investment.

5.) **Argonne National Laboratory Energy Systems GREET Model** ●

https://greet.es.anl.gov/carbon_footprint_calculator

Calculator for evaluating total fleet fuel use and greenhouse gas emissions for On-Road and Off-Road fleet vehicles using a variety of petroleum and alternative fuels. On Road vehicles included in model are: School bus, transit bus, shuttle, para-transit bus, refuse truck, street sweeper, delivery step van, transport freight truck, medium-duty / heavy-duty pick-up truck, and maintenance utility vehicle. Off-road vehicles included in model are numerous and include: Forklift, front-end loaders, excavator, bulldozer, grader, and concrete mixer etc. User input includes: number of fleet vehicles by type and fuel, and annual fuel used. Output includes: annual petroleum usage and GHG emissions for entire fleet.

Ease of use key:

●	Easy to use, higher level analysis
●	Moderately technical, requires some fleet-specific data, mid level analysis
●	Very technical, requires detailed fleet data, detailed analysis

California Clean Transportation Policies

CA Low Carbon Fuel Standard (LCFS)

- 10% reduction in carbon intensity of CA fuel mix by 2020

Zero Emission Vehicle (ZEV) Action Plan

- 1.5 million ZEVs and near-zero emission vehicles on the roads in California by 2025

Zero Emission Vehicle (ZEV) Production

- 20% of new light duty vehicles sold in CA in 2025 will be ZEVs

Zero Emission Medium and Heavy-Duty Vehicle Program

- Funding for zero and near-zero emission heavy-duty vehicles, including vocational trucks, short- and long-haul trucks, buses, and eligible off-road vehicles and equipment. The Program is expected to provide \$12 million to \$20 million in funding annually through January 1, 2018

Mobile Source Emissions Reductions Requirements

- CA Air Board policy to reduce emissions from heavy-duty diesel vehicles
- Vehicles with a GVWR >14,000lbs are required to install emissions control devices
- By 2023 all heavy-duty trucks must have 2010 engines or newer

Heavy-duty Vehicle Greenhouse Gas Emissions Regulations

- Box trailers >53' and tractors that pull them must be equipped with fuel efficient tires and aerodynamic trailer devices to improve fuel economy and reduce greenhouse gas emissions

Heavy-duty Truck Idle Reduction Requirements

- A driver of a diesel-fueled vehicle with a gross vehicle weight rating of more than 10,000 pounds may not idle the vehicle's primary engine for more than five consecutive minutes, and is not allowed to operate a diesel-fueled auxiliary power system (APS) on the vehicle for more than five minutes when located within 100 feet of a restricted area.

California Road User Charge Pilot

- Pilot program to test 5 mileage reporting methods proposed to replace gas tax
- Volunteer participants needed to determine best method



How to Make the Transition to a Clean Fleet



1. Advocate for a CA North State Clean Cities Coalition!
 - a. Clean Cities Coalition can help fleet managers:
 - i. Perform fleet conversion analyses using online calculators
 - ii. Organize trainings for mechanics and drivers
 - iii. Provide guidance on fueling infrastructure options
2. Join West Coast Electric Fleets and make a formal pledge to incorporate electric and/or hydrogen vehicles into your fleet:
<http://www.westcoastelectricfleets.com/fleet-pledge/>
3. Assess fleet vehicles in need of near-term retirement and replacement and consider replacing them with alternative fuel vehicles and/or clean vehicle technologies
4. Use the Clean Vehicle Buyers guides to identify fleet vehicles that match your operational needs (included in this toolkit)
5. Use online calculators to assess changes in:
 - a. Total cost of ownership
 - b. Emissions reductions
 - c. Fuel infrastructure costs
 - d. Fuel cost
6. Review state and federal mandates and incentives (included in this toolkit)
7. Develop a fleet conversion plan:
 - a. Identify fuel and vehicle types that match operations
 - b. Assess fueling infrastructure needs and ownership options
 - c. Identify staff training needs
 - d. Develop budget and schedule of purchases
8. Apply for incentives
9. Make vehicle purchases!
10. Provide training for drivers and maintenance staff.



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REDWOOD COAST
Energy Authority



SCHATZ
ENERGY
RESEARCH
CENTER



SISKIYOU COUNTY
ECONOMIC DEVELOPMENT

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California Incentives **Available to the North State Region**

Listed below are the summaries of all current California laws, incentives, regulations, funding opportunities, and other initiatives related to alternative fuels and vehicles, advanced technologies, or air quality.

State Incentives

Natural Gas Vehicle Incentives

The Institute of Transportation Studies at University of California Irvine administers the Natural Gas Vehicle Incentive Project (NGVIP) to provide funding for qualified natural gas vehicles (NGVs). Eligible vehicles include new on-road natural gas light-, medium-, or heavy-duty vehicles that are fully warranted and meet California Air Resources Board requirements. Each applicant must complete a NGVIP reservation form and receive a confirmed reservation before purchasing an eligible NGV.

GVWR (lbs.)	Incentive Amount
Up to 8,500	\$1,000
8,501 - 16,000	\$6,000
16,001 - 26,000	\$11,000
26,001 - 33,000	\$20,000
33,001 & greater	\$25,000

Each applicant may apply for up to 30 incentives. Vehicles must operate on natural gas at least 90% of the time for three years after purchase. Incentive amounts are based on the NGV's gross vehicle weight rating (GVWR) as follows:

The California Energy Commission Alternative and Renewable Fuel and Vehicle Technology Program (ARFVTP) funds the NGVIP. For more information, including vehicle eligibility requirements and exclusions, see the [NGVIP](#) website. Funding availability is based on confirmed reservations. No funding is currently available, though applicants may be placed on a waitlist (verified October 2015).

Hybrid Electric Vehicle (HEV) and Zero Emission Vehicle (ZEV) Purchase Vouchers

Through the Hybrid Truck and Bus Voucher Incentive Project (HVIP), the California Air Resources Board provides vouchers to eligible fleets to reduce the incremental cost of qualified medium- and heavy-duty HEVs and ZEVs at the time of purchase. Vouchers are available on a first-come, first-served basis and range from \$12,000 to \$110,000. Only fleets that operate vehicles in California are eligible. HVIP funds for the current year are still available (verified October 2015). For more information, including a list of qualified vehicles and other requirements, see the [HVIP](#) website.

Plug-In Hybrid and Zero Emission Light-Duty Vehicle Rebates

The Clean Vehicle Rebate Project (CVRP) offers rebates for the purchase or lease of qualified vehicles. The rebates are for up to \$5,000 for zero emission and plug-in hybrid light-duty vehicles that the California Air Resources Board (ARB) has approved or certified. The rebates are available on a first-come, first-served basis to individuals, business owners, and government entities in California that purchase or lease new eligible vehicles. Manufacturers must apply to ARB to have their vehicles included in CVRP. ARB determines annual funding amounts for CVRP, which is expected to be effective through 2023. In June 2015, ARB and the State Energy Resources Conservation and Development Commission approved revisions to the criteria and

requirements for CVRP, including eligibility limitations based on income and increased rebate amounts for low and moderate income consumers. Implementation of these changes is expected in late 2015 (verified October 2015). For more information, including a list of eligible vehicles and other requirements, see the [CVRP](#) website. (Reference [California Health and Safety Code](#) 44274 and 44258)

Electric Vehicle Supply Equipment (EVSE) Loan and Rebate Program

The Electric Vehicle Charging Station Financing Program (Program), part of the California Capital Access Program (CalCAP), provides loans for the design, development, purchase, and installation of EVSE at small business locations in California. The Program may provide up to 100% coverage to lenders on certain loan defaults. Lenders must apply to the California Pollution Control Financing Authority (CPCFA) to participate and enroll each qualified EVSE loan through CalCAP. Upon approval, CPCFA will pay a premium into the lender's loan loss reserve account for up to 20% of the loan amount and contribute an additional 10% for installations in multi-unit dwellings and disadvantaged communities.

Small businesses are eligible for a rebate of 50% of the loan loss reserve amount after the small business repays the loan in full or meets monthly payment deadlines over a 48-month period. Eligible borrowers must be small businesses with 1,000 or fewer employees and must maintain legal control of the EVSE for the entire loan period. The maximum loan amount is \$500,000 per qualified small business and can be insured for up to four years.

The California Energy Commission funds the Program. For more information, including EVSE technical requirements and eligibility requirements for both borrowers and lenders, see the [Program](#) website.

Alternative Fuel and Vehicle Incentives

The California Energy Commission (CEC) administers the Alternative and Renewable Fuel and Vehicle Technology Program (ARFVTP) to provide financial incentives for businesses, vehicle and technology manufacturers, workforce training partners, fleet owners, consumers, and academic institutions with the goal of developing and deploying alternative and renewable fuels and advanced transportation technologies. The CEC must prepare and adopt an annual [Investment Plan\(PDF\)](#) for the ARFVTP to establish funding priorities and opportunities that reflect program goals and to describe how program funding will complement other public and private investments. Funded projects include:

- Commercial alternative fuel vehicle (AFV) demonstrations and deployment;
- Alternative and renewable fuel production;
- Research and development of alternative and renewable fuels and innovative technologies;
- AFV manufacturing;
- Workforce training; and
- Public education, outreach, and promotion.

The program will be available until January 1, 2024. For more information, see the [ARFVTP](#) website. (Reference [California Health and Safety Code](#) 44270-44274.7 and [California Code of Regulations](#), Title 13, Chapter 8.1)

Voluntary Vehicle Retirement Incentives

Through the California Bureau of Automotive Repair's (Bureau) Consumer Assistance Program (CAP), the owner of a personal motor vehicle may receive \$1,500 to retire the vehicle early from operation. Owners must meet low-income eligibility requirements, must successfully complete a smog test (pass or fail) within 180 days of application, and may only retire one vehicle annually. An eligible vehicle must be registered in the state without substantial lapse for at least two years prior to retirement. The owner must retire the vehicle at a dismantler under contract with the Bureau. The Bureau also offers financial assistance of up to \$500 toward emissions-related repairs for vehicles remaining in service that cannot pass the biennial smog check inspection. For more information, additional eligibility requirements and, application materials, see the [CAP](#) website. (Reference [California Health and Safety Code 44062.3](#) and [44125](#))

Alternative Fuel Vehicle (AFV) and Fueling Infrastructure Grants

The Motor Vehicle Registration Fee Program (Program) provides funding for projects that reduce air pollution from on- and off-road vehicles. Eligible projects include purchasing AFVs and developing alternative fueling infrastructure. Contact [local air districts](#) and see the [Program](#) website for more information about available grant funding and distribution from the Program. (Reference [California Health and Safety Code 44220](#) (b))

Emissions Reductions Grants

The Carl Moyer Memorial Air Quality Standards Attainment Program (Program) provides incentives to cover the incremental cost of purchasing engines and equipment that are cleaner than required by law. Eligible projects include heavy-duty fleet modernization, light-duty vehicle replacements and retrofits, idle reduction technology, off-road vehicle and equipment purchases, and alternative fuel and electric vehicle infrastructure projects. The Program provides funds for significant near-term reductions in nitrogen oxide emissions, reactive organic gases, and particulate matter emissions. Funding is available until January 1, 2024. Contact [local air districts](#) for more information about grant funding availability and distribution. Also see the [Program](#) website.

The California Air Resources Board, in consultation with local air districts, must convene working groups to evaluate the Program's policies and goals. (Reference [Senate Bill 513](#), 2015, and [California Health and Safety Code 44275-44299.2](#))

Point of Contact

Diesel Hotline
California Air Resources Board
Phone: (866) 6DIESEL (634-3735)
8666diesel@arb.ca.gov

Heavy-Duty Vehicle Emissions Reduction Grants

The Goods Movement Emission Reduction Program (Program) provides funding for projects that reduce emissions from freight movement in the state, including heavy-duty truck replacement, repower, or retrofit; and truck stop electrification infrastructure development. For more information about funding application opportunities, see the [Program](#) website. (Reference [California Health and Safety Code 39625-39627.5](#))

Point of Contact

Goods Movement Emission Reduction Program
California Air Resources Board
Phone: (916) 44-GOODS (444-6637)

Low Emissions School Bus Grants

The Lower-Emission School Bus Program (Program) provides grant funding for the replacement of older school buses and for the purchase of air pollution control equipment for in-use buses. The California Air Resources Board must verify that the air pollution control devices reduce particulate matter emissions by at least 85% for each retrofitted school bus. Public school districts in California that own their buses are eligible to receive funding. Private school transportation providers that contract with public school districts in California to provide transportation services are also eligible to receive funding for the retrofit of in-use buses. New buses purchased to replace older buses may be fueled with diesel or an alternative fuel, provided that the required emissions standards specified in the current guidelines for the Program are met. Funds are also available for replacing on-board natural gas tanks on older school buses and for updating deteriorating natural gas fueling infrastructure. Commercially available hybrid electric school buses may be eligible for partial funding. For more information, see the [Program](#) website and contact local air districts to confirm funding availability. (Reference [California Health and Safety Code 41081 and 44099](#))

Point of Contact

Lisa Jennings
Air Pollution Specialist, Lower-Emission School Bus Program
California Air Resources Board
Phone: (916) 322-6913
Fax: (916) 322-3923
lisa.jennings@arb.ca.gov
<http://www.arb.ca.gov/msprog/schoolbus/schoolbus.htm>

Alternative Fuel and Advanced Vehicle Career Training

The Clean Technology and Renewable Energy Job Training, Career Technical Education, and Dropout Prevention Program provides grant funding to school districts for occupational training programs that focus on employment in clean technology and renewable energy businesses, such as clean vehicle technologies, and cellulosic ethanol, biodiesel, biomass power, green waste, and fuel cell production. This program is subject to funding appropriation. (Reference [California Education Code 54690-54699](#))

Compressed Natural Gas (CNG) and Electricity Tax Exemption for Transit Use

CNG and electricity that local agencies or public transit operators use as motor vehicle fuel to operate public transit services is exempt from applicable user taxes a county imposes. (Reference [California Revenue and Taxation Code 7284.3](#))

Residential Electric Vehicle Supply Equipment (EVSE) Financing Program

Property-Assessed Clean Energy (PACE) financing allows property owners to borrow funds to pay for energy improvements, including purchasing and installing EVSE. The borrower repays over a defined period of time through a special assessment on the property. Local governments in California are authorized to establish PACE programs. Property owners must agree to a contractual assessment on the property tax bill, have a clean property title, and be current on property taxes and mortgages. Financing limits are 15% of the first \$700,000 of the property value and 10% of the remaining property value. For more information, see the California Alternative Energy and Advanced Transportation Financing Authority [PACE](#) website. (Reference [California Public Resources Code 26050-26082](#))

Utility/Private Incentives

Clean Vehicle Electricity and Natural Gas Rate Reduction - PG&E

Pacific Gas & Electric (PG&E) offers discounted Residential Time-of-Use rates for electricity used for plug-in electric vehicle charging. Discounted rates are also available for compressed or uncompressed natural gas used in natural gas vehicle (NGV) home fueling appliances. For more information, see the PG&E [Electric Vehicle Rate Options](#) and [NGV Rates](#) websites.

Biofuel Volume Rebate Program - Propel Fuels

Propel Fuels offers a rebate to qualified fleet customers for monthly purchases of more than 500 gallons of biodiesel blends and E85. Fleet customers must purchase the fuel directly from Propel public retail locations using the Propel CleanDrive Fleet Card. The program offers a rebate of \$0.03 per gallon for purchases of less than 1,000 gallons of biofuel per month, and \$0.05 per gallon for purchases of 1,000 gallons or more per month. The rebate is applied at the end of each monthly billing cycle. For more information, see the [Propel Clean Fleet Solution](#) website.

Alternative Fuel Vehicle (AFV) and Hybrid Electric Vehicle (HEV) Insurance Discount

Farmers Insurance provides a discount of up to 10% on all major insurance coverage for HEV and AFV owners. To qualify, the automobile must be a dedicated AFV using ethanol, compressed natural gas, propane, or electricity, or be a HEV. A complete vehicle identification number is required to validate vehicle eligibility. For more information, see the Farmers [California Insurance Discounts](#) website.

Federal Incentives

Idle Reduction Equipment Excise Tax Exemption

Qualified on-board idle reduction devices and advanced insulation are exempt from the federal excise tax imposed on the retail sale of heavy-duty highway trucks and trailers. The exemption also applies to the installation of qualified equipment on vehicles after the vehicles have been placed into service. For a list of eligible products and additional information about product exemption eligibility criteria, see the U.S.

Environmental Protection Agency's (EPA) SmartWay Technology Program Federal Excise Tax Exemption website. The exemption applies to equipment that was determined by the Administrator of the EPA, in consultation with the Secretary of Energy and the Secretary of Transportation, to reduce the idling of the tractor at a motor vehicle rest stop or other location where such vehicles are temporarily parked or remain stationary. Only equipment sold on or after October 4, 2008, is eligible. For more information, see IRS Publication 510(PDF) and the instructions for IRS Form 720, which are available on the IRS Forms and Publications website.

Point of Contact

Excise Tax Branch; U.S. Internal Revenue Service; Phone: (202) 317-6855

Qualified Two-Wheeled Plug-in Electric Drive Motor Vehicle Tax Credit

NOTE: This incentive originally expired on December 31, 2013, but was retroactively extended through December 31, 2016, by H.R. 2029(PDF).

A credit is available for the purchase of a new qualified two-wheeled plug-in electric drive vehicle that draws propulsion using a traction battery that has at least 2.5 kilowatt hours (kWh) of capacity, uses an external source of energy to recharge the battery, has a gross vehicle weight rating of up to 14,000 pounds, is manufactured primarily for use on public roadways, and can drive at least 45 miles per hour. The credit is for 10% of the cost

of the qualified vehicle, up to \$2,500, and applies to vehicles acquired between January 1, 2015, and December 31, 2016. For more information about claiming the credit, see the Internal Revenue Service (IRS) Plug-In Electric Vehicle Credit website and IRS Form 8936, which is available on the IRS Forms and Publications website.

Point of Contact

U.S. Internal Revenue Service; Phone: (800) 829-1040

Alternative Fuel Infrastructure Tax Credit

NOTE: This incentive originally expired on December 31, 2013, but was retroactively extended through December 31, 2016, by H.R. 2029(PDF).

Fueling equipment for natural gas, liquefied petroleum gas (propane), liquefied hydrogen, electricity, E85, or diesel fuel blends containing a minimum of 20% biodiesel installed between January 1, 2015, and December 31, 2016, is eligible for a tax credit of 30% of the cost, not to exceed \$30,000. Permitting and inspection fees are not included in covered expenses. Fueling station owners who install qualified equipment at multiple sites are allowed to use the credit towards each location. Consumers who purchased qualified residential fueling equipment prior to December 31, 2016, may receive a tax credit of up to \$1,000. Unused credits that qualify as general business tax credits, as defined by the Internal Revenue Service (IRS), may be carried backward one year and carried forward 20 years. For more information about claiming the credit, see IRS Form 8911, which is available on the IRS Forms and Publications website.

Point of Contact

U.S. Internal Revenue Service; Phone: (800) 829-1040

Alternative Fuel Excise Tax Credit

NOTE: This incentive was retroactively extended multiple times, most recently through December 31, 2016, by Public Law 114-113, 2015.

A tax incentive is available for alternative fuel that is sold for use or used as a fuel to operate a motor vehicle. A tax credit in the amount of \$0.50 per gallon is available for the following alternative fuels: compressed natural gas (CNG), liquefied natural gas (LNG), liquefied hydrogen, liquefied petroleum gas (propane), P-Series fuel, liquid fuel derived from coal through the Fischer-Tropsch process, and compressed or liquefied gas derived from biomass. For propane, CNG, and LNG sold after December 31, 2015, the tax credit is based on the gasoline gallon equivalent (GGE) or diesel gallon equivalent (DGE). For taxation purposes, one GGE is equal to 5.75 pounds (lbs.) of propane and 5.66 lbs. of CNG. One DGE is equal to 6.06 lbs. of LNG.

For an entity to be eligible to claim the credit they must be liable for reporting and paying the federal excise tax on the sale or use of the fuel in a motor vehicle. Tax exempt entities such as state and local governments that dispense qualified fuel from an on-site fueling station for use in vehicles qualify for the incentive. Eligible entities must be registered with the Internal Revenue Service (IRS). The incentive must first be taken as a credit against the entity's alternative fuel tax liability; any excess over this fuel tax liability may be claimed as a direct payment from the IRS. The tax credit is not allowed if an incentive for the same alternative fuel is also determined under the rules for the ethanol or biodiesel tax credits. Under current law, this tax credit is applicable to fuel sold or used between January 1, 2015, and December 31, 2016. For more information about claiming the credit, see IRS Publication 510, IRS Forms 637, 720, 4136, and 8849, and IRS Notice 2015-56 (August 2015), which are available on the IRS Forms and Publications website.

Point of Contact

Excise Tax Branch; U.S. Internal Revenue Service Office of Chief Counsel
Phone: (202) 317-6855

Fuel Cell Motor Vehicle Tax Credit

NOTE: This incentive was retroactively extended through December 31, 2016, by H.R. 2029(PDF).

A tax credit of up to \$8,000 is available for the purchase of qualified light-duty fuel cell vehicles, depending on the vehicle's fuel economy. Tax credits are also available for medium- and heavy-duty fuel cell vehicles; credit amounts are based on vehicle weight. Vehicle manufacturers must follow the procedures as published in Notice 2008-33(PDF) to certify to the Internal Revenue Service (IRS) that a vehicle meets certain requirements to claim the fuel cell vehicle credit. Notice 2008-33 also provides guidance to taxpayers about claiming the credit. Under current law, this tax credit expires on December 31, 2016. For more information about claiming the credit, see IRS Form 8910, which is available on the IRS Forms and Publications website.

Point of Contact

U.S. Internal Revenue Service; Phone: (800) 829-1040

Qualified Plug-In Electric Drive Motor Vehicle Tax Credit

A tax credit is available for the purchase of a new qualified plug-in electric drive motor vehicle that draws propulsion using a traction battery that has at least five kilowatt-hours (kWh) of capacity, uses an external source of energy to recharge the battery, has a gross vehicle weight rating of up to 14,000 pounds, and meets specified emission standards. The minimum credit amount is \$2,500, and the credit may be up to \$7,500, based on each vehicle's traction battery capacity and the gross vehicle weight rating. The credit will begin to be phased out for each manufacturer in the second quarter following the calendar quarter in which a minimum of 200,000 qualified plug-in electric drive vehicles have been sold by that manufacturer for use in the United States. This tax credit applies to vehicles acquired after December 31, 2009. For more information, including qualifying vehicles and sales by manufacturer, see the Internal Revenue Service (IRS) Plug-In Electric Vehicle Credit website. Also refer to IRS Form 8936, which is available via the IRS Forms and Publications website.

Point of Contact

U.S. Internal Revenue Service; Phone: (800) 829-1040

Ethanol Infrastructure Grants and Loan Guarantees

The Rural Energy for America Program (REAP) provides loan guarantees and grants to agricultural producers and rural small businesses to purchase renewable energy systems or make energy efficiency improvements. Eligible renewable energy systems include flexible fuel pumps, or blender pumps, that dispense intermediate ethanol blends. The maximum loan guarantee is \$25 million and the maximum grant funding is 25% of project costs. At least 20% of the grant funds awarded must be for grants of \$20,000 or less. This program is funded through fiscal year 2018 (verified November 2015), but is subject to congressional appropriations thereafter. For more information, see the REAP website. (Reference Public Laws 113-79 and 112-240, and 7 U.S. Code 8107)

Point of Contact

USDA Office of Rural Development, Business & Cooperative Programs; Phone: (202) 690-4730

U.S. DEPARTMENT OF
ENERGY

Energy Efficiency &
Renewable Energy



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Clean Cities

2016 Vehicle Buyer's Guide



Biodiesel

Ethanol Flex-Fuel

Hybrid Electric

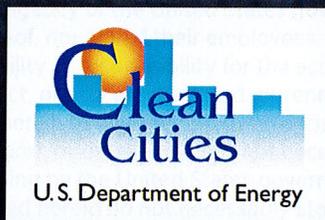
Plug-In Hybrid

All-Electric

Hydrogen Fuel Cell

Propane

Natural Gas





Clean Cities 2016 Vehicle Buyer's Guide

As the number of new alternative fuels and advanced technology vehicles continues to grow, drivers and fleets are finding it's easier than ever to cut petroleum use, minimize emissions, and save on fuel costs. This guide features a comprehensive list of light-duty vehicles offered by major original equipment manufacturers (OEMs) in model year 2016.

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Chevrolet Colorado Biodiesel. Photo from General Motors

For decades, petroleum has dominated the transportation fuel arena in America. Still, there are signs that oil dependency in the U.S. transportation market may gradually be changing. In 2014, the share of alternative, non-petroleum fuels used in transportation more than doubled to reach 8.5%—its highest level since 1954.*

Although conventional fuel prices are at their lowest point since 2008, auto manufacturers and industry continue to innovate. Driven by increasingly stringent emissions and Corporate Average Fuel Economy (CAFE) standards, as well as consumer demand, vehicles powered solely by alternative fuels like electricity, and advanced technologies like plug-in hybrid and hybrid electric vehicles (PHEVs, HEVs), have seen an increasing presence in the marketplace.

Highly anticipated models from manufacturers such as Chevrolet, Ford, and BMW, among others, continue to reflect consumer excitement. Hydrogen fuel cell vehicles (FCEVs) are also creating interest, as new offerings from Honda and Toyota join the Hyundai FCEV in limited markets.

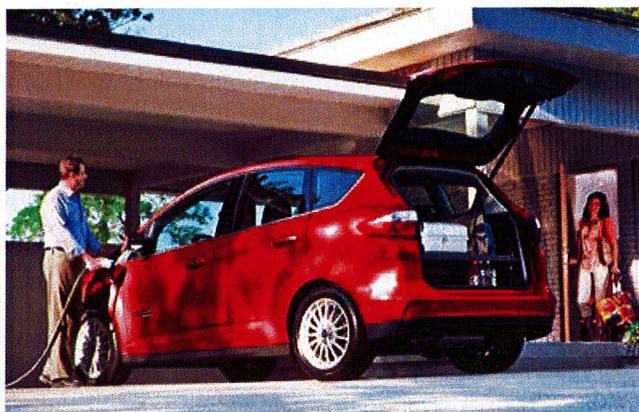


Mitsubishi i-MIEV. Photo provided by Mitsubishi Motors North America, Inc.

While the near-term benefits of lower-cost gasoline and diesel are appealing, it's key to take a long-term view when making an important investment, such as in buying

* "Nonpetroleum share of transportation energy at highest level since 1954," U.S. Energy Information Administration, May 15, 2015, www.eia.gov/todayinenergy/detail.cfm?id=21272.

a vehicle. Events such as natural disasters and shifting political climates can impact the supply and demand for petroleum—as well as price—dramatically. Because alternative fuels such as natural gas, propane, electricity, hydrogen, and biofuels diversify the fuel supply, they can mitigate some pricing and supply fluctuations.



Ford C-Max Energi PHEV. Photo from Ford Motor Company

Alternative fuel and advanced technology vehicle sales are expected to increase and a greener future is well within grasp. Mounting consumer acceptance, the increasing availability of vehicle models from OEMs, and expanding fueling infrastructure, have all played a major role in the development of this market. State and federal incentives, consumer desire for more fuel-efficient, cleaner forms of transportation, and interest in lower operational costs are also helping to drive this growth.

Whether selecting biodiesel, electricity, ethanol, hydrogen, natural gas, or propane to power your next vehicle, there are plenty of options to choose from. To learn more about which alternative fuel or technology would best fit your needs, contact your local Clean Cities coordinator (cleancities.energy.gov/coalitions/contacts/).

About This Guide

The 2016 Vehicle Buyer's Guide features a wide-ranging list of model year (MY) 2016 light-duty alternative fuel and advanced technology vehicle options. The guide includes vehicle-specific information about manufacturer, fuel economy, vehicle specifications, energy impact, and emissions ratings, allowing you to compare similar vehicles to make an informed buying decision. Because of the limited availability of some models, comprehensive pricing information is not included here. You can find manufacturer suggested retail prices and compare vehicles directly available from manufacturers at www.fueleconomy.gov.

While this guide provides a snapshot of the vehicles available, the Alternative Fuels Data Center (AFDC) hosts an online database (afdc.energy.gov/vehicles/search) that is regularly updated and may contain more vehicles and data than were available at the time this guide was printed.

NOTE: *This guide contains light-duty vehicles with a Gross Vehicle Weight Rating (GVWR) below 8,500 lbs and medium-duty passenger vehicles with a GVWR below 10,000 lbs. For any vehicles with a GVWR above 10,000 lbs, refer to the Clean Cities Guide to Alternative Fuel and Advanced Medium- and Heavy-Duty Vehicles (afdc.energy.gov/uploads/publication/medium_heavy_duty_guide.pdf).*

Fuel Economy

By choosing the most fuel-efficient vehicle in a particular class, it is possible to save significantly on fuel costs each year. This can add up to thousands of dollars over a vehicle's lifetime. It is important to understand how the fuel economy of an alternative fuel vehicle compares with a gasoline vehicle in order to make a wise decision.

For many vehicles listed in this guide, three fuel economy estimates are given: (1) A "city" estimate that represents urban driving, in which a vehicle is started in the morning (after being parked all night) and driven in stop-and-go traffic, (2) a "highway" estimate that represents a mixture of rural and interstate highway driving in a warmed-up vehicle, typical of longer trips in free-flowing traffic, and (3) a "combined" estimate that represents a combination of city driving (55%) and highway driving (45%).



GMC Savana CNG. Photo from General Motors

Fuel economy estimates for all vehicles are based on manufacturers' laboratory tests using U.S. Environmental Protection Agency (EPA) standardized methods to allow for fair comparisons. Plug-in hybrid electric vehicles (PHEVs) have estimates for both (1) gasoline only or (2) charge-depleting operation, which may be electric only or a combination of electric and gasoline use. Their fuel economy estimates are expressed in miles per gallon (mpg) and miles per gallon of gasoline equivalent (MPGe), representing the number of miles a vehicle can travel using a quantity of fuel with the same energy content as a gallon of gasoline. Ethanol flex-fuel vehicles (FFVs), which can use gasoline and E85—a blend containing 51%–83% ethanol, depending on geography and season—have estimates for both fuels.

For some vehicle models, EPA data were not available at the time of this guide's publication. In addition, new models are introduced by manufacturers on an ongoing basis throughout the model year. For updated information on vehicle offerings and answers to frequently asked questions about fuel economy estimates, visit www.fueleconomy.gov.

Your vehicle's actual fuel economy is likely to vary from the EPA estimates presented in this guide. See the sidebar on page 38 for more information on factors that affect fuel economy. The EPA estimates presented here are useful for comparing vehicles even though they may not accurately predict the mpg you will achieve. FuelEconomy.gov's My MPG feature (fueleconomy.gov/mpg/MPG.do) can help you calculate and track your personal fuel economy, compare it with EPA test ratings, and share it with other users. To find out what you can do to improve the fuel economy of your vehicle, explore the pages in the "Gas Mileage Tips" section on FuelEconomy.gov (fueleconomy.gov/feg/drive.shtml).

Energy Impact Scores

Energy Impact Scores allow buyers to compare vehicles' annual estimated petroleum consumption. These scores represent the number of barrels of petroleum a vehicle will likely consume each year—one barrel equals 42 gallons. The scores are based on 15,000 annual miles of driving, 45% highway and 55% city.

Smog Scores

Smog Scores, determined by EPA, reflect vehicle tailpipe emissions that contribute to local and regional air quality problems and related health issues. Scores are based on U.S. vehicle emission standards for criteria pollutants, including carbon monoxide, formaldehyde, nitrogen oxides, non-methane organic gas, and particulate matter. Scores range from 1 to 10, where 10 is best. Because all-electric vehicles and plug-in hybrid electric vehicles produce little to no tailpipe emissions when operating in all-electric mode, Smog Scores are not listed. Instead, the vehicles' estimated all-electric driving range is given to provide more relevant information.

Greenhouse Gas Emissions Scores

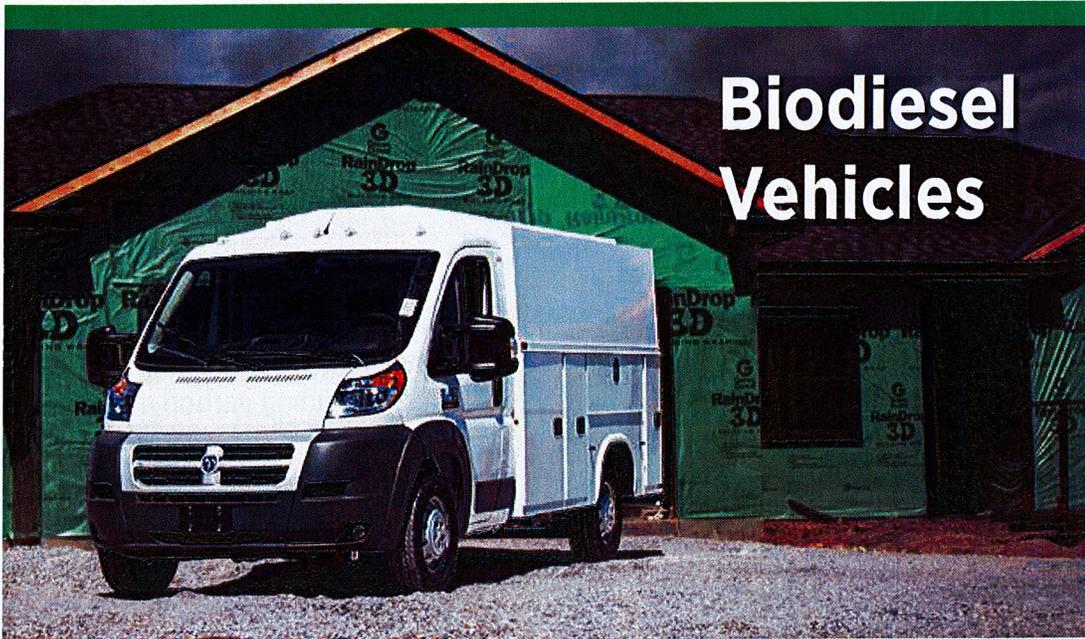
Greenhouse Gas (GHG) Scores, which are also determined by EPA, reflect tailpipe emissions of carbon dioxide and other GHGs, which contribute to climate change. Scores range from 1 to 10, where 10 is best. The GHG Scores in this guide do not reflect emissions related to the production or distribution of fuels or vehicles.



Search Tool Serves Up Alternative Vehicle Options

If you're in the market for a greener ride, then look no further than the Alternative Fuel and Advanced Vehicle Search (afdc.energy.gov/vehicles/search), where searching alternative fuel vehicle (AFV) and hybrid options is made simple. The tool draws from a database of available light-, medium-, and heavy-duty AFVs, as well as engines and hybrid systems. The results are displayed in a simple at-a-glance format with basic vehicle information and pictures, and can be filtered as desired by Fuel/Technology, Class/Type, and Manufacturer.

Other features of the tool include a “download” option, which allows you to generate a spreadsheet file containing a list of results produced from a filtered search.



Ram ProMaster. Photo from Chrysler Group LLC

Biodiesel is a renewable option for diesel vehicles

Biodiesel is an easy-to-implement, renewable, and economically viable alternative to conventional diesel. It can be produced from new and used vegetable oils, animal fats, and recycled restaurant grease. When used in place of diesel, biodiesel can significantly reduce life cycle carbon emissions. Note, however, that straight vegetable oil is not biodiesel and is not legal to use as a motor fuel.

Pure biodiesel (B100) must be produced to established specifications (ASTM D6751) to ensure proper performance at any blend level. It can then be blended and used in different concentrations ranging from B2 (2% biodiesel, 98% diesel fuel) to B100. B20 (20% biodiesel, 80% diesel fuel) is the most commonly labeled biodiesel blend in the United States, and has been shown to perform well in cold weather and in older engines. Engines operating on B20 have similar fuel consumption, horsepower, and torque to conventional diesel.



Nissan Titan Diesel. © 2013 and 2014 Nissan. Nissan, Nissan model names and the Nissan logo are registered trademarks of Nissan.

Nearly 14 million diesel vehicles on the road in the United States today are capable of using some blend of biodiesel. Currently, all major OEMs support the use of at least B5 under their warranties, while many OEMs have approved the use of B20 or higher blends in at least some of their vehicles. Before using B20 in any new vehicle, consult the manufacturer's warranty. The table below lists vehicles approved by their manufacturers for B20 use.

Biodiesel is available in all 50 states. As of December 2015, there were close to 250 publicly accessible fueling stations across the country offering biodiesel blends of B20 or above.

To find biodiesel stations in your area, see the Alternative Fueling Station Locator at afdc.energy.gov/stations.



Chevrolet Express. Photo from General Motors

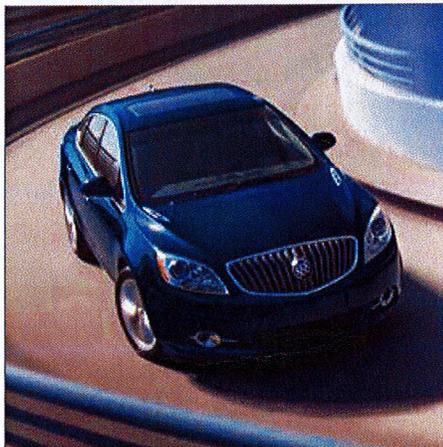
Biodiesel Vehicle Model	Vehicle Type	Engine Size	Starting MSRP
Chevrolet Colorado 2WD/4WD	Pickup	2.8L I4	\$20,100
Chevrolet Express Prisoner Transport	Van	6.0L V8	-
Chevrolet Express 2500	Van	6.6L V8	-
Chevrolet Silverado 2500 HD 2WD/4WD	Pickup	6.6L V8	\$32,955
Ford Super Duty F-250	Pickup	6.7L V8	\$32,385
GMC Savana 2500	Van	6.6L V8	-
GMC Sierra 2500 HD 2WD/4WD	Pickup	6.6L V8	-
Jeep Grand Cherokee 2WD/FWD	SUV	3.0L V6	\$29,995
Nissan Titan 2WD/4WD	Pickup	5.0L V8	-
Ram 1500 2WD/4WD	Pickup	3.0L V6	-
Ram 2500 HD	Pickup	6.7L I6	-
Ram Promaster 1500/2500	Van	3.0L V6	\$27,475

This guide contains light-duty vehicles with a Gross Vehicle Weight Rating (GVWR) below 8,500 lbs and medium-duty passenger vehicles with a GVWR below 10,000 lbs. For any vehicles with a GVWR above 10,000 lbs, refer to the Clean Cities Guide to Alternative Fuel and Advanced Medium- and Heavy-Duty Vehicles (afdc.energy.gov/uploads/publication/medium_heavy_duty_guide.pdf).



Ethanol Flex-Fuel Vehicles

Audi Q5. Photo courtesy of Audi



Buick Verano. Photo from General Motors

Flex-fuel vehicles can operate on gasoline or E85

FFVs are able to run on gasoline, E85, or any combination of the two. E85 is a blend of gasoline and ethanol, with the ethanol content ranging between 51% and 83%, depending on geographical location and season.* A gallon of ethanol contains less energy than a gallon of gasoline; therefore, an FFV running on E85 can have lower fuel economy compared to a conventional vehicle depending on the season and blend level.

E15 and Intermediate Ethanol Blends

The EPA has approved the use of ethanol-gasoline blends up to E15 in all MY 2001 and newer vehicles. Fuel containing more than 15% ethanol is only approved for use in FFVs. This includes various intermediate blends now available from stations with ethanol blender pumps. Using blends higher than E15 in non-FFVs may result in maintenance, safety, or performance problems.

Blends of E15 and above are not approved for use in any gasoline engine that is MY 2000 or older, including motorcycles; vehicles with heavy-duty engines; off-road vehicles, such as boats and snowmobiles; or off-road equipment, such as lawnmowers and chainsaws. For more information, visit afdc.energy.gov/fuels/ethanol_e15.html.



Jeep Renegade. Photo from Chrysler Group LLC

FFVs have one fueling system, which is made up of ethanol-compatible components and a powertrain controller calibrated to accommodate the higher oxygen content of E85. Because FFVs are so similar to gasoline vehicles, many drivers are unaware that they are driving or fueling one. An FFV is often distinguished by an emblem on the back of the vehicle, and many FFVs have yellow fuel caps.

E85 is available at more than 2,700 publicly accessible stations. See page 38 for information about finding E85 stations near you.

* The E85 fuel economy estimates presented in this section are based on tests with blends containing 79%–83% ethanol.

Selling an Older Vehicle?

If you plan to sell a vehicle, use FuelEconomy.gov's used car label tool to advertise your vehicle's fuel economy. The tool is easy to use—just enter some basic information and then print a label for the vehicle's window or download a graphic to use in your advertisement. The label provides EPA estimates for the vehicle when it was new. Actual results will vary for many reasons, including current driving conditions and how the car was previously driven and maintained. Aftermarket modifications to the vehicle can also affect fuel economy, especially those that change the vehicle's weight, aerodynamics, or wheel/tire size (see page 35).

Used Vehicle
Fuel Economy and Environment

E85 **Flexible-Fuel Vehicle**
Gasoline-Ethanol (E85)

2013 Ford E350 Wagon FFV
5.4L, 8cyl, Automatic 4-spd, Flex-fuel Vehicle

Fuel Economy When New

Reg. Gas	13 MPG	11 15
combined	7.7 gallons per 100 miles	city hwy

E85

10 MPG	9 11
combined	city hwy
10.0 gallons per 100 miles	

This vehicle emits 692 grams of CO₂ per mile.
(When operated on gasoline)

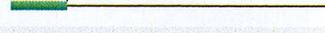
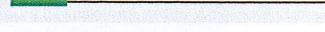
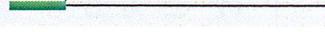
Actual results will vary for many reasons including driving conditions and how the car was driven, maintained, or modified. The label contains EPA mileage and CO₂ estimates for this vehicle when new.

fuel economy.gov

Smartphone
QR Code

Calculate personalized estimates and compare vehicles.

This information is provided as a sample only and should not be construed as an actual used car label. Source: fuel economy.gov/feg/UsedCarLabel.jsp

Flex-Fuel Vehicle Model	Engine Size	Energy Impact Score* (barrels petroleum/year) On Gasoline  On E85 	Smog Score**	GHG Score** Gasoline/ E85	Fuel Economy (mpg)		Starting MSRP
					Gasoline Combined/ City/Hwy	E85 Combined/ City/Hwy	
Audi A4 Quattro	2.0 I4	13.2  4.2 	5	6/6	25/21/30	18/15/22	\$37,000
Audi A5 Quattro	2.0 I4	13.2  4.2 	5	6/6	25/21/30	18/15/22	\$40,500
Audi A5 Cabriolet Quattro	2.0 I4	13.7  4.4 	5	5/6	24/21/29	17/15/21	\$39,600
Audi Allroad Quattro	2.0 I4	13.7  4.4 	5	5/6	24/21/28	17/15/21	\$42,700
Audi Q5 AWD	2.0 I4	14.3  4.7 	5	5/5	23/20/28	16/14/19	\$40,900
Buick LaCrosse FWD/AWD	3.6L V6	15.7  4.7 	6	5/5	21/18/28	16/14/20	-
Buick Verano	2.4L I4	-	-	-	-	-	\$23,480
Chevrolet Caprice Police Patrol Vehicle	3.6L V6	-	-	-	-	-	-
Chevrolet Caprice Police Patrol Vehicle	6.0L V8	-	-	-	-	-	-
Chevrolet Equinox FWD/AWD	2.4L I4	12.7  4.2 	6	6/6	26/22/32	18/15/22	\$22,600

* Assuming 15,000 miles driven per year. ** 10 = Best.

Table continued on next page

Flex-Fuel Vehicle Model	Engine Size	Energy Impact Score* (barrels petroleum/year) On Gasoline  On E85 	Smog Score**	GHG Score** Gasoline/ E85	Fuel Economy (mpg)		Starting MSRP
					Gasoline Combined/ City/Hwy	E85 Combined/ City/Hwy	
Chevrolet Equinox FWD/AWD	3.6L V6	-	-	-	-	-	\$28,200
Chevrolet Express Cargo Paratransit	6.0L V8	-	-	-	-	-	-
Chevrolet Express Prisoner Transport	6.0L V8	-	-	-	-	-	-
Chevrolet Express 2500	6.0L V8	-	-	-	-	-	\$31,590
Chevrolet Impala	3.6L V6	15.0  4.7 	6	5/5	22/19/29	16/14/20	\$27,095
Chevrolet Impala Limited Police	3.6L V6	-	-	-	-	-	-
Chevrolet Silverado 1500 2WD/4WD	5.3L V8	17.3  5.3 	-	4/4	19/16/23	14/12/17	\$34,675
Chevrolet Silverado 1500 2WD/4WD	4.3L V6	16.5  5.3 	-	4/4	20/18/24	14/12/16	\$26,655
Chevrolet Silverado 1500 Special Services 2WD/4WD	5.3L V8	-	-	-	-	-	-
Chevrolet Silverado 2500HD 2WD/4WD	6.0L V8	-	-	-	-	-	\$32,955

* Assuming 15,000 miles driven per year. ** 10 = Best.

Table continued on next page

Flex-Fuel Vehicle Model	Engine Size	Energy Impact Score* (barrels petroleum/year) On Gasoline  On E85 	Smog Score**	GHG Score** Gasoline/ E85	Fuel Economy (mpg)		Starting MSRP
					Gasoline Combined/ City/Hwy	E85 Combined/ City/Hwy	
Chevrolet Suburban 2WD/4WD	5.3L V8	18.3  5.8 	5	4/4	18/16/23	13/11/17	\$49,700
Chevrolet Tahoe Police 2WD/4WD	5.3L V8	-	-	-	-	-	-
Chevrolet Tahoe 2WD/4WD	5.3L V8	18.3  5.3 	5	4/4	18/16/23	14/11/17	\$47,000
Chrysler 200	2.4L I4	11.8  3.6 	6	7/7	28/23/36	21/17/28	\$21,995
Chrysler 200 FWD/AWD	3.6L V6	15.0  4.4 	6	5/5	23/19/29	17/14/23	\$21,995
Chrysler 300 RWD/AWD	3.6L V6	14.3  4.4 	6	5/5	23/19/31	17/14/23	\$31,895
Chrysler Dart	2.0L I4	12.2  3.7 	6	6/7	27/24/34	20/18/25	-
Chrysler Town & Country	3.6L V6	16.5  5.3 	6	4/5	20/17/25	14/12/18	\$29,995
Dodge Charger Police Pursuit	3.6L V6	-	-	-	-	-	-
Dodge Charger RWD/AWD	3.6L V6	14.3  4.4 	6	5/5	23/19/31	17/14/23	\$27,995

* Assuming 15,000 miles driven per year. ** 10 = Best.

Table continued on next page

Flex-Fuel Vehicle Model	Engine Size	Energy Impact Score* (barrels petroleum/year) On Gasoline  On E85 	Smog Score**	GHG Score** Gasoline/ E85	Fuel Economy (mpg)		Starting MSRP
					Gasoline Combined/ City/Hwy	E85 Combined/ City/Hwy	
Dodge Durango Police Special Service Vehicle	3.6L V6	-	-	-	-	-	-
Dodge Grand Caravan	3.6L V6	16.5  5.3 	6	4/5	20/17/25	14/12/18	\$21,995
Dodge Journey FWD	3.6L V6	17.3  5.3 	6	4/5	19/17/25	14/12/18	\$20,995
Ford Police Interceptor	3.5L V6	-	-	-	-	-	-
Ford Police Interceptor	3.7L V6	-	-	-	-	-	-
Ford Police Interceptor Utility	3.7L V6	-	-	-	-	-	-
Ford Explorer 2WD/AWD	3.5L V6	16.5  5.0 	5	4/5	20/17/24	15/13/18	\$30,700
Ford F-150	3.5L V6	16.5  5.0 	-	4/5	20/18/25	15/13/18	\$26,315
Ford F-150	5.0L V8	18.3  5.8 	-	5/5	18/15/25	13/11/16	\$26,315
Ford Focus	2.0L I4	10.6  3.3 	-	7/8	31/27/40	23/20/29	\$17,225

* Assuming 15,000 miles driven per year. ** 10 = Best.

Table continued on next page



Flex-Fuel Vehicle Model	Engine Size	Energy Impact Score* (barrels petroleum/year) On Gasoline  On E85 	Smog Score**	GHG Score** Gasoline/ E85	Fuel Economy (mpg)		Starting MSRP
					Gasoline Combined/ City/Hwy	E85 Combined/ City/Hwy	
Ford Super Duty F-250	6.2L V8	-	-	-	-	-	\$32,385
Ford Transit 250	3.7L V6	-	-	-	-	-	\$30,960
Ford Transit Connect	2.5L I4	14.3  4.4 	5	5/5	23/20/28	17/15/20	\$22,675
Ford Transit 150/250	3.7L V6	20.6  6.8 	-	5/5	16/14/18	11/10/13	\$30,960
GMC Savana 2500	6.0L V8	-	-	-	-	-	-
GMC Savana Cargo Paratransit	6.0L V8	-	-	-	-	-	-
GMC Sierra 1500 2WD/4WD	4.3L V6	17.3  5.3 	-	4/4	19/16/23	14/12/17	\$27,275
GMC Sierra 1500 2WD/4WD	5.3L V8	16.5  5.3 	-	4/4	20/18/24	14/12/16	\$40,752
GMC Sierra 2500 2WD/4WD	6.0L V8	-	-	-	-	-	-
GMC Terrain Denali FWD/AWD	2.4L I4	-	-	-	-	-	\$33,975

* Assuming 15,000 miles driven per year. ** 10 = Best.

Table continued on next page

Flex-Fuel Vehicle Model	Engine Size	Energy Impact Score* (barrels petroleum/year)		Smog Score**	GHG Score** Gasoline/ E85	Fuel Economy (mpg)		Starting MSRP
		On Gasoline	On E85			Gasoline Combined/ City/Hwy	E85 Combined/ City/Hwy	
GMC Terrain FWD/AWD	2.4L I4	12.7	4.2	6	6/6	26/22/32	18/15/22	\$23,975
GMC Yukon 1500 2WD/4WD	5.3L V8	18.3	5.8	5	4/4	18/16/23	13/11/17	\$48,165
GMC Yukon XL 1500 2WD/4WD	5.3L V8	18.3	5.8	5	4/4	18/16/23	13/11/17	\$50,865
Jeep Cherokee 2WD/FWD	2.4L I4	13.2	4.2	6	6/6	25/22/31	18/15/23	\$23,395
Jeep Renegade 2WD/FWD	2.4L I4	13.2	3.9	6	6/7	25/22/31	19/17/24	\$17,995
Mercedes-Benz CLA 250 4Matic	2.0L I4	12.2	3.7	-	6/7	27/24/33	20/18/24	-
Mercedes-Benz E350	3.5L V6	14.3	4.7	5	5/5	23/20/29	16/14/20	\$53,100
Mercedes-Benz E350 4Matic	3.5L V6	14.3	4.4	5	5/6	23/20/28	17/15/21	\$55,600
Mercedes-Benz GLA 250 4Matic	2.0L I4	12.2	3.9	-	6/6	27/24/32	19/17/24	-
Mercedes-Benz GLE350 4Matic	3.5L V6	17.3	5.0	5	4/5	19/17/22	15/13/17	-

* Assuming 15,000 miles driven per year. ** 10 = Best.

Table continued on next page

Flex-Fuel Vehicle Model	Engine Size	Energy Impact Score* (barrels petroleum/year) On Gasoline  On E85 	Smog Score**	GHG Score** Gasoline/ E85	Fuel Economy (mpg)		Starting MSRP
					Gasoline Combined/ City/Hwy	E85 Combined/ City/Hwy	
Nissan Armada 2WD/4WD	5.6L V8	-	-	-	-	-	-
Nissan Titan 2WD/4WD	5.6L V8	-	-	-	-	-	-
Ram 1500 2WD/4WD	3.6L V6	16.5  5.3 	6	4/4	20/17/25	14/12/17	\$26,045
Toyota Sequoia 4WD	5.7L V8	23.5  7.5 	5	2/2	14/13/17	10/9/13	\$44,965
Toyota Tundra 2WD/4WD	5.7L V8	22.0  6.8 	5	2/3	15/13/18	11/9/13	\$31,690

* Assuming 15,000 miles driven per year. ** 10 = Best.

This guide contains light-duty vehicles with a Gross Vehicle Weight Rating (GVWR) below 8,500 lbs and medium-duty passenger vehicles with a GVWR below 10,000 lbs. For any vehicles with a GVWR above 10,000 lbs, refer to the Clean Cities Guide to Alternative Fuel and Advanced Medium- and Heavy-Duty Vehicles (afdc.energy.gov/uploads/publication/medium_heavy_duty_guide.pdf).



Hybrid Electric Vehicles

Kia Optima. Photo courtesy of Kia Motors America

Hybrid technologies can boost fuel economy

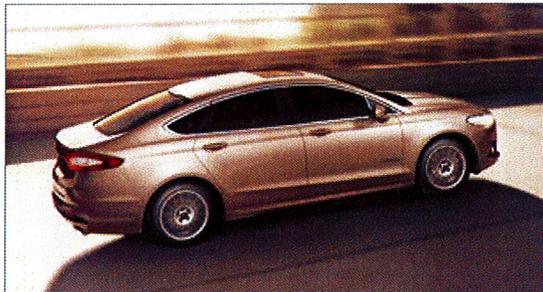
HEVs are powered by an ICE and an electric motor that uses energy stored in a battery. HEVs run on gasoline, and cannot be plugged in like EVs or PHEVs. Instead, the battery is charged primarily through regenerative braking, which allows the battery to capture energy normally lost when braking. The extra power provided by the electric motor allows for a smaller engine, resulting in better fuel economy without sacrificing performance. As a result, HEVs are often 25% to 40% more fuel efficient than comparable conventional vehicles, some achieving fuel economy ratings above 40 mpg. The increased fuel economy results in lower levels of air pollutants and greenhouse gas emissions.

Hybrid models include “full” and “mild” configurations

This guide lists only “full” hybrids—those that can run on battery power alone during stops and at low speeds. With this configuration, at higher speeds the electric motor can also assist the gasoline engine by providing additional power. “Mild” hybrids, also known as stop-start vehicles, lack this intermittent electric-only driving capability but do save fuel by assisting the engine and shutting it down when the vehicle stops.



Toyota RAV 4. Photo from Toyota Motor Sales, U.S.A., Inc.



Ford Fusion. Photo from Ford Motor Company

Hybrid Electric Vehicle Model	Engine Size	Energy Impact Score* (barrels petroleum/year)	Smog Score**	GHG Score**	Fuel Economy (mpg) Combined/City/Hwy	Starting MSRP
Acura RLX Hybrid	3.5L V6	11.0	7	7	30/28/32	\$59,950
Audi Q5 Hybrid AWD	2.0 14	12.7	5	6	26/24/30	\$52,500
BMW ActiveHybrid 5	3.0L 16	12.7	5	6	26/23/30	\$63,095
Chevrolet Malibu	1.8L 14	-	-	-	-	\$21,625
Ford C-MAX Hybrid	2.0L 14	8.2	-	9	40/42/37	\$24,170
Ford Fusion Hybrid	2.0L 14	7.8	7	9	42/44/41	\$25,675
Honda CRZ	1.5L 14	8.9	9	9	37/36/39	\$19,995
Hyunda Sonata	2.4L 14	8.0	5	9	41/39/43	\$26,000
Infiniti Q50 Hybrid FWD/AWD	3.5L V6	-	-	-	-	-
Infiniti Q50S Hybrid FWD/AWD	3.5L V6	-	-	-	-	-
Infiniti Q70 Hybrid	3.5L V6	-	-	-	-	-

* Assuming 15,000 miles driven per year. ** 10 = Best.

Table continued on next page

Hybrid Electric Vehicle Model	Engine Size	Energy Impact Score* (barrels petroleum/year)	Smog Score**	GHG Score**	Fuel Economy (mpg) Combined/City/Hwy	Starting MSRP
Infiniti QX60 Hybrid	2.5L I4	-	-	-	-	-
Kia Optima	2.4L I4	8.7 	-	9	38/36/40	-
Lexus CT 200h	1.8L I4	7.8 	7	9	42/43/40	\$31,250
Lexus ES 300h	2.5L I4	8.2 	7	9	40/40/39	\$40,920
Lexus GS 450h	3.5L V6	10.6 	7	8	31/29/34	-
Lexus GS 450h F Sport	3.5L V6	-	-	-	-	-
Lexus LS 600h L	5.0L V8	-	-	-	20/19/23	\$120,440
Lexus NX 300h FWD/AWD	2.5L I4	10.0 	7	8	33/35/31	\$39,720
Lexus RX 450h FWD/AWD	3.5L V6	-	-	-	-	-
Lincoln MKZ Hybrid	2.0L I4	8.2 	7	9	40/41/39	\$35,190
Subaru XV Crosstrek Hybrid	2.0L H4	10.6 	7	7	31/30/34	\$26,395

* Assuming 15,000 miles driven per year. ** 10 = Best.

Table continued on next page

Hybrid Electric Vehicle Model	Engine Size	Energy Impact Score* (barrels petroleum/year)	Smog Score**	GHG Score**	Fuel Economy (mpg) Combined/City/Hwy	Starting MSRP
Toyota Avalon	2.5L I4	-	-	-	-	-
Toyota Camry	2.5L I4	8.0 	7	9	41/43/39	\$26,790
Toyota Highlander	3.5L V6	-	-	-	-	-
Toyota Prius	1.8L I4	-	-	-	-	-
Toyota Prius c	1.5L I4	-	-	-	-	-
Toyota Prius v	1.8L I4	7.8 	7	9	42/44/40	\$26,675
Toyota RAV 4	2.5L I4	-	-	-	-	-
Volkswagen Jetta Hybrid	1.4L I4	7.5 	7	9	44/42/48	\$31,120

*Assuming 15,000 miles driven per year. ** 10 = Best.

This guide contains light-duty vehicles with a Gross Vehicle Weight Rating (GVWR) below 8,500 lbs and medium-duty passenger vehicles with a GVWR below 10,000 lbs. For any vehicles with a GVWR above 10,000 lbs, refer to the Clean Cities Guide to Alternative Fuel and Advanced Medium- and Heavy-Duty Vehicles (afdc.energy.gov/uploads/publication/medium_heavy_duty_guide.pdf).

Thinking of Going Electric?

Below are the types of electric-drive vehicles at a glance:

HEVs: HEVs are powered by an internal combustion engine (ICE) and by an electric motor that uses energy stored in a battery. The battery is charged by the ICE and through regenerative braking, which recaptures some of the energy that is normally lost when braking. The vehicle cannot be plugged in to charge. The extra power provided by the electric motor allows for a smaller engine, resulting in better fuel economy without sacrificing performance.



Acura RLX. Photo from American Honda

PHEVs: PHEVs are powered by an ICE and by an electric motor that uses energy stored in a battery (larger than the battery in an HEV). The battery can be charged by plugging in to an electric power source, through regenerative braking, and by the ICE. The larger battery allows a PHEV to travel on battery power alone.



Porsche Cayenne S e-Hybrid.
Photo courtesy of Porsche

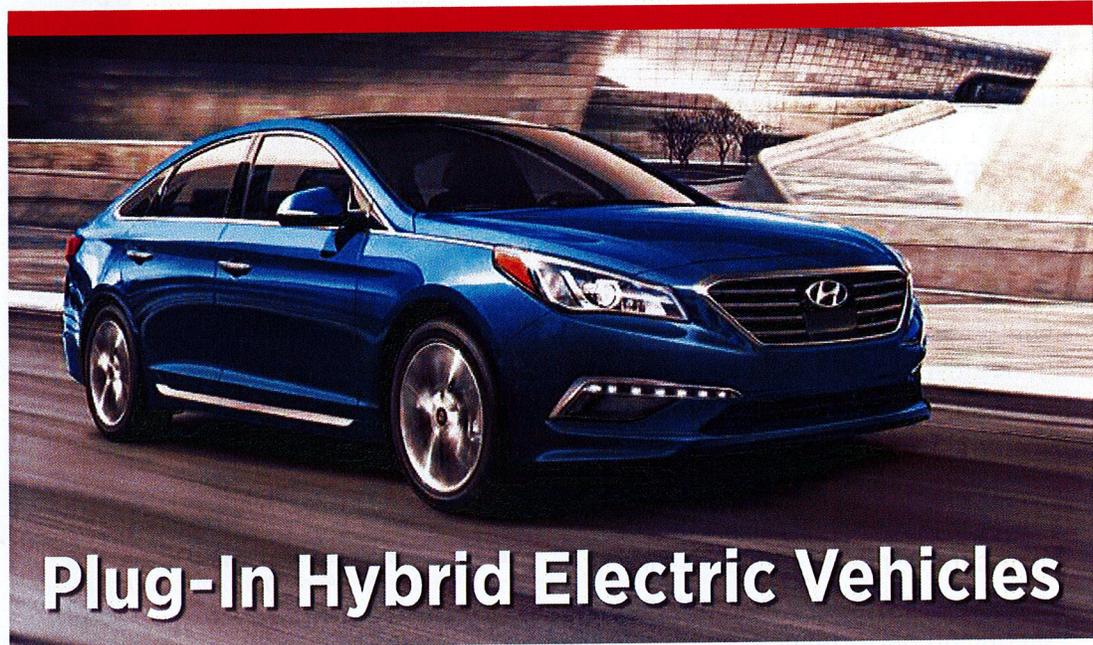
Unlike all-electric vehicles (EVs), PHEVs don't have to be plugged in before driving. They can be fueled solely with gasoline, like a conventional HEV. However, they will not achieve maximum fuel economy or take full advantage of their all-electric capabilities without plugging in. Some PHEVs are considered "extended-range electric vehicles" because the ICE only charges the battery and does not directly propel the vehicle.



EVs: EVs run on electricity alone. They are powered by an electric motor that uses energy stored in a battery (larger than the batteries in an HEV or PHEV). EV batteries are charged by plugging the vehicle in to an electric power source and (to a lesser degree) through regenerative braking.



Ford Focus. Photo from Ford Motor Company

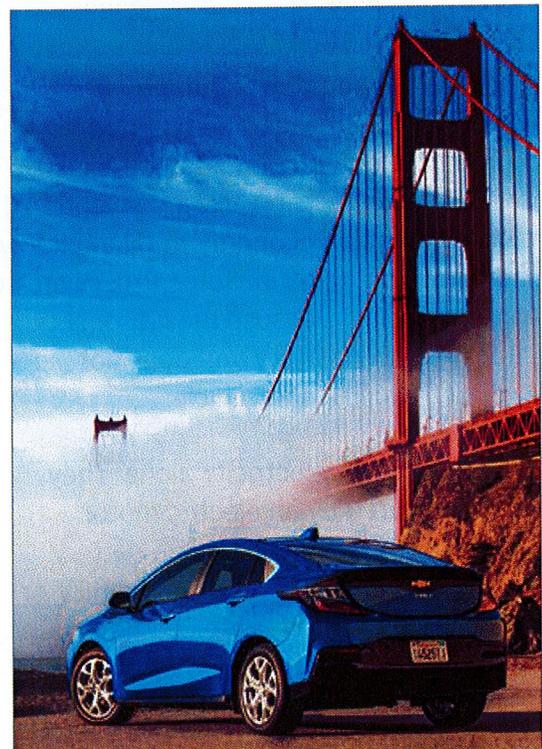


Hyundai Sonata. Photo courtesy of Hyundai Motor America

Plug-in hybrid electric vehicles provide flexibility in fueling and charging

PHEVs use a battery to power an electric motor and use another fuel, such as gasoline, to power an ICE. This configuration takes advantage of electricity's economic and emissions benefits, while providing the security of an ICE in terms of range and refueling. PHEV batteries can be charged by "plugging in" to an electric charging station or simple electrical wall outlet on a dedicated circuit. They can also be charged by the ICE or through regenerative braking.

Powering the vehicle with electricity some or all of the time can significantly reduce operating costs, petroleum use, and tailpipe emissions. Even when running on gasoline, PHEVs, like HEVs, consume less fuel and produce lower emissions than comparable conventional vehicles. However, unlike HEVs, some PHEVs can travel a significant distance on battery power alone. This is known as the vehicle's "all-electric range" and is generally 20–40 miles, depending on the model. Although most EVs will be charged at home or at the workplace, a growing network of more than 12,000 public charging



Chevrolet Volt. Photo from General Motors

stations is also available nationwide. (See page 38 for information about finding stations in your area.)

PHEV prices tend to be higher than those of similar conventional and hybrid electric vehicles although some of the higher initial cost may be recovered through fuel savings, a federal tax credit, or state incentives.

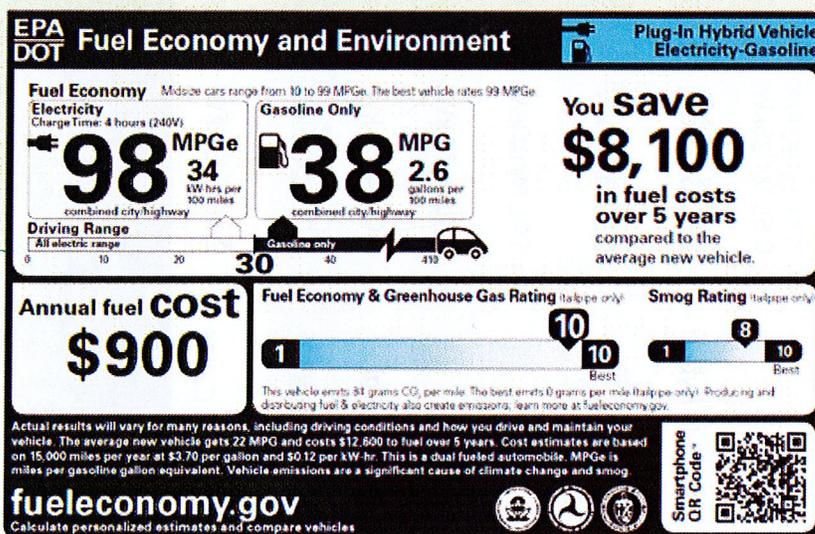


BMW xDrive40e. Photo from BMW

Plug-In Vehicles and EPA Labels

EPA labels display EV fuel economy estimates in kilowatt-hours per 100 miles and in MPGe. MPGe represents the number of miles a vehicle can travel using a quantity of fuel with the same energy content as a gallon of gasoline (33 kilowatt-hours). For PHEVs, EPA labels display separate fuel economy estimates for electric-only and gasoline-only modes. Estimates for gasoline-only operation are expressed in mpg and in gallons per 100 miles. All of this information allows consumers to compare efficiency across different types of vehicles and fuels. For more information, visit fuelconomy.gov/label.

EPA plug-in vehicle labels also contain information about GHG emissions and air pollution. EVs have favorable smog scores and GHG scores as compared to conventional vehicles. However, this information reflects tailpipe emissions only, and it does not account for well-to-wheels emissions, which are all emissions associated with the production, processing, and distribution of electricity (or gasoline, or any other fuel that powers the vehicle). For information on comparing well-to-wheels emissions of conventional and plug-in vehicles, visit afdc.energy.gov/vehicles/electric_emissions.php.



This information is provided as a sample only and should not be construed as an actual new car label. Source: fuelconomy.gov/feg/UsedCarLabel.jsp

Plug-In Hybrid Electric Vehicle Model	Gasoline Engine/ Electric Motor	Energy Impact Score* (barrels petroleum/ year)	All-Electric Range (miles)	GHG Score**	Fuel Economy		Starting MSRP
					Gasoline Only (mpg) Combined/City/Hwy	Electric + Gasoline (mpge) Combined City-Hwy	
Audi A3 Sportback e-tron	1.4L I4/75 kW	-	-	-	-	-	\$37,900
BMW i3 REX	0.6L I2/125kW	1.6	72	10	39/41/37	117	\$42,400
BMW i8 Plug-in Hybrid	1.5L I3/96kW	7.4	14	10	28/28/29	76	\$136,500
BMW X5 xDrive40e Plug-in Hybrid	2.0L I4/83 kW	9.2	14	8.0	22/21/24	56	\$62,100
Cadillac ELR	1.4L I4/111 kW	3.5	40	10	32/31/33	85	\$65,000
Chevrolet Volt	1.4L I4/111 kW	2.0	53	10	43/42/42	106	\$33,170
Ford C-MAX Energi	2.0L I4/68 kW	4.9	20	10	38/40/36	88	\$31,770
Ford Fusion Energi	2.0L I4/68 kW	4.9	20	10	38/40/36	88	\$33,900
Hyundai Sonata Plug-in Hybrid	2.4L I4/50 kW	3.8	-	10	40/38/41	99	-
McLaren P1	3.8L V8/132 kW	10.8	-	4	17/16/20	18	-

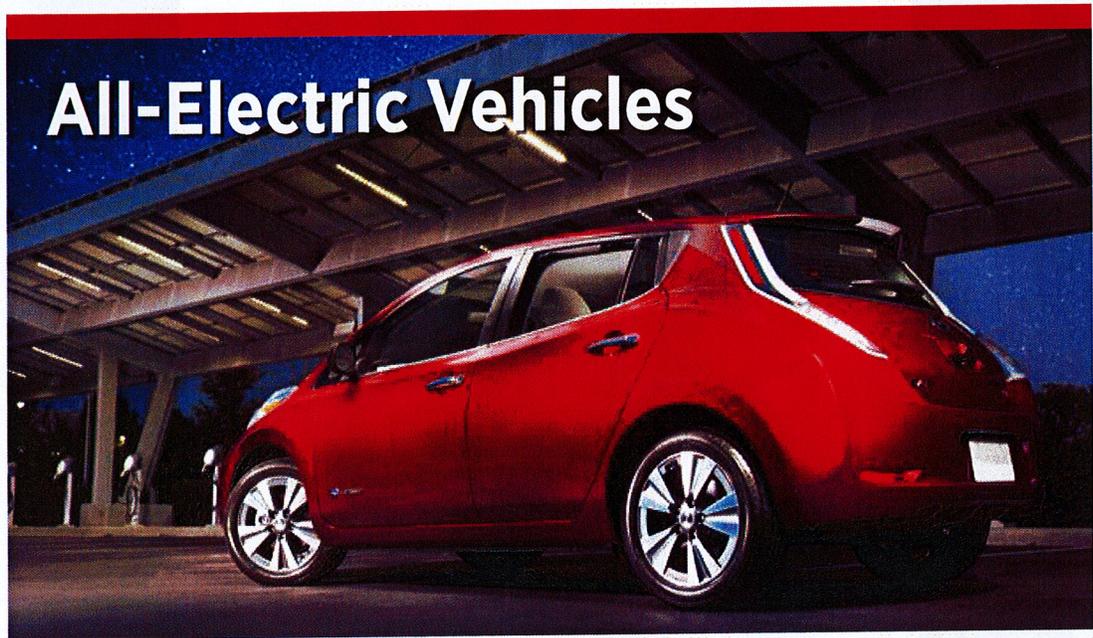
* Assuming 15,000 miles driven per year. ** 10 = Best.

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Plug-In Hybrid Electric Vehicle Model	Gasoline Engine/ Electric Motor	Energy Impact Score* (barrels petroleum/ year)	All-Electric Range (miles)	GHG Score**	Fuel Economy		Starting MSRP
					Gasoline Only (mpg) Combined/City/Hwy	Electric + Gasoline (mpge) Combined City-Hwy	
Mercedes-Benz C350e Plug-in Hybrid	2.0L I4/60 kW	-	18 (est.)	-	-	-	-
Mercedes-Benz S550e Plug-in Hybrid	3.0L V6/85 kW	8.2 	14	9	26/24/30	58	\$95,650
Porsche 918 Spyder	4.6L V8/95 kW front/115 kW rear	10.4 	12	8	22/20/24	67	\$845,000
Porsche Cayenne S e-Hybrid	3.0L V6/70 kW	9.5 	14	9	22/21/24	47	\$77,200
Porsche Panamera S e-Hybrid	3.0L V6/70 kW	8.0 	15	8	25/23/29	51	\$96,100
Toyota Prius Plug-in	1.8L I4/38 kW	-	-	-	-	-	-
Volvo XC90 T8 Plug-in Hybrid	2.0L I4/65 kW	-	20 (est.)	-	-	-	\$68,100

* Assuming 15,000 miles driven per year. ** 10 = Best.

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Nissan Leaf. © 2013 and 2014 Nissan. Nissan, Nissan model names and the Nissan logo are registered trademarks of Nissan.

All-electric vehicles can yield significant emissions benefits

EVs are powered by an electric motor (or motors) using a battery, which is charged by “plugging in.” Electric motors provide quiet operation and require less maintenance than traditional ICEs. EVs produce no tailpipe emissions, although the power plant producing the electricity may emit them (this varies geographically). Recharging can take 20 minutes to more than 20 hours, depending on several factors, such as the type of charging equipment used; the type of battery, its capacity, and how depleted it is; and the capacity of the vehicle’s internal charger.

EVs are extremely efficient, usually earning fuel-economy ratings above 100 MPGe. However, their efficiency can be more sensitive to driving style, driving conditions, and accessory use than conventional vehicles. Their prices also tend to be higher than those of similar conventional and HEVs because of the cost of their batteries. However, researchers are working to improve battery technologies and reduce the associated costs. Buyers may recover some of the higher initial cost through fuel savings, a federal tax credit, or state incentives. See page 29 to find out how to calculate EV fuel savings, and page 38 for information about finding incentives.



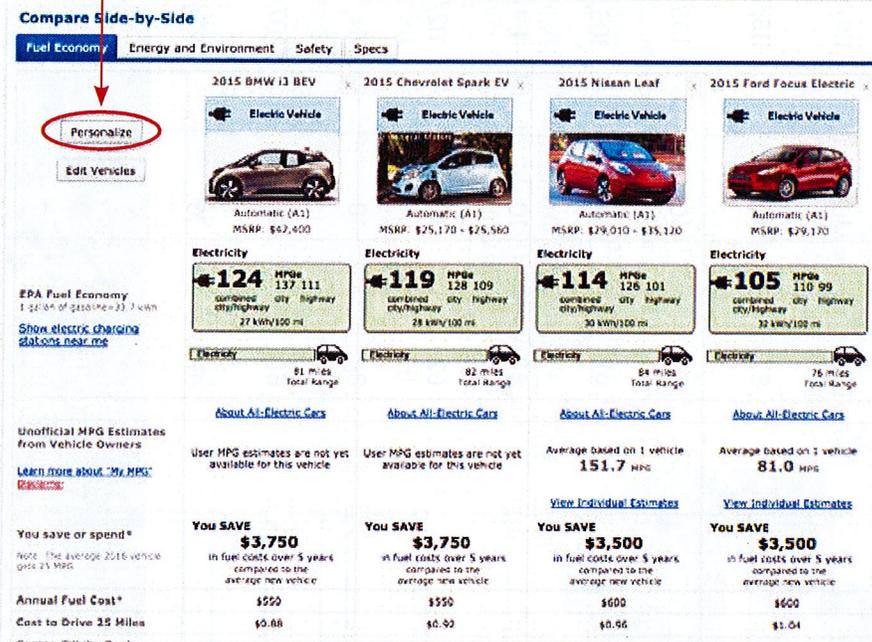
Fiat 500e. Photo from Chrysler Group LLC

The popularity of EVs is expected to grow. Most major vehicle manufacturers now offer a fully electric vehicle for sale or lease. However, some models are only available in

Compare Fuel Costs Before You Buy

The Find and Compare Cars tool at fuelconomy.gov features an annual fuel cost calculator that allows you to enter your local gasoline prices and typical driving conditions (percentage of city and highway driving) to obtain the most accurate fuel cost information for your vehicle.

Click "Personalize" to enter the fuel cost calculator



Electric-Drive Vehicle Terms

Regenerative Braking: Regenerative braking allows HEVs, PHEVs, and EVs to capture energy normally lost during braking by using the electric motor as a generator and storing that captured energy in the battery.

All-Electric Range: The distance an electric-drive vehicle can drive on battery power alone without recharging.

select markets, such as California and other states that have zero-emission mandates in place. In December 2015, there were more than 388,000 registered plug-in vehicles on the road, 201,000 of which were EVs. A growing network of more than 12,000 publicly available charging stations supports these vehicles, although most EVs will be charged at home or at the workplace. The number of DC fast charging stations—stations that can add 50 to 70 miles of range to the battery in roughly 20 minutes—is also rising, allowing for shorter charging times and increasing vehicle utility. See page 38 for information about finding stations in your area, and visit the AFDC at afdc.energy.gov/fuels/electricity_infrastructure.html to learn more about EV charging.

Electric Vehicle Model	Electric Motor/ Battery Size	Energy Impact Score* (barrels petroleum/ year)	Driving Range (miles)	GHG Score**	Fuel Economy (mpge) Combined/City/Hwy	Starting MSRP
BMW i3	125 kW/21 kWh	0.2 ▼	81	10	124/137/111	\$42,400
Chevrolet Spark	104 kW/20 kWh	0.2 ▼	82	10	119/128/108	-
Fiat 500e	83kW/24 kWh	0.2 ▼	87	10	116/122/108	-
Ford Focus	107 kW/23 kWh	0.2 ▼	76	10	105/110/99	\$29,170
Kia Soul	50 kW/16.4 kWh	0.2 ▼	93	10	105/120/92	\$31,950
Mercedes-Benz B250e	132 kW/28 kWh	0.2 ▼	87	10	84/85/82	-
Mitsubishi i-MiEV	49 kW/16 kWh	0.2 ▼	62	10	112/126/99	\$22,995
Nissan Leaf	80 kW/24 kWh	0.2 ▼	84	10	114/126/101	-
smart fortwo	55 kW/17.6 kWh	0.2 ▼	68	10	107/122/93	-
Tesla Model S	285 kW/70 kWh	0.2 ▼	265	10	89/88/90	-

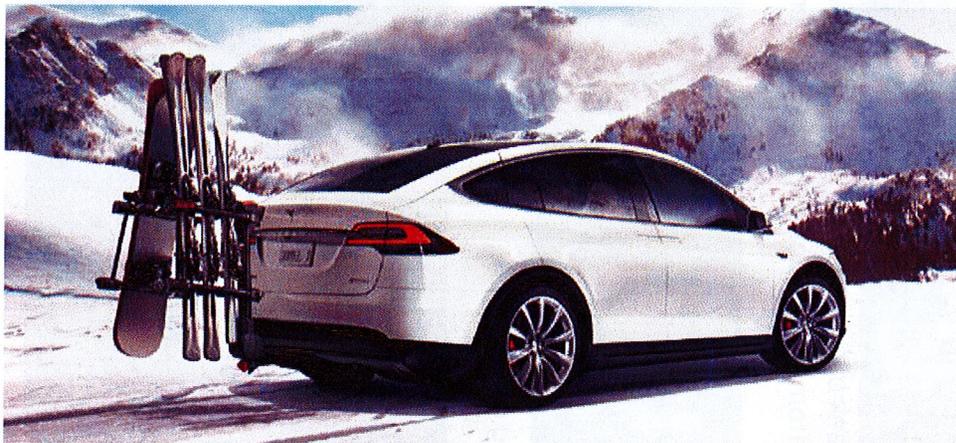
* Assuming 15,000 miles driven per year. ** 10 = Best.

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Electric Vehicle Model	Electric Motor/ Battery Size	Energy Impact Score* (barrels petroleum/ year)	Driving Range (miles)	GHG Score**	Fuel Economy (mpge) Combined/City/Hwy	Starting MSRP
Tesla Model S AWD	350 kW front/ 285 kW rear/90 kWh	0.2 ▼	270	10	100/95/106	-
Tesla Model X AWD 90D	193 kW front/ 193 kW rear/90 kWh	0.2 ▼	257	10	92/90/94	-
Volkswagen e-Golf	85 kW/24.2 kWh	0.2 ▼	83	10	116/126/105	\$28,995

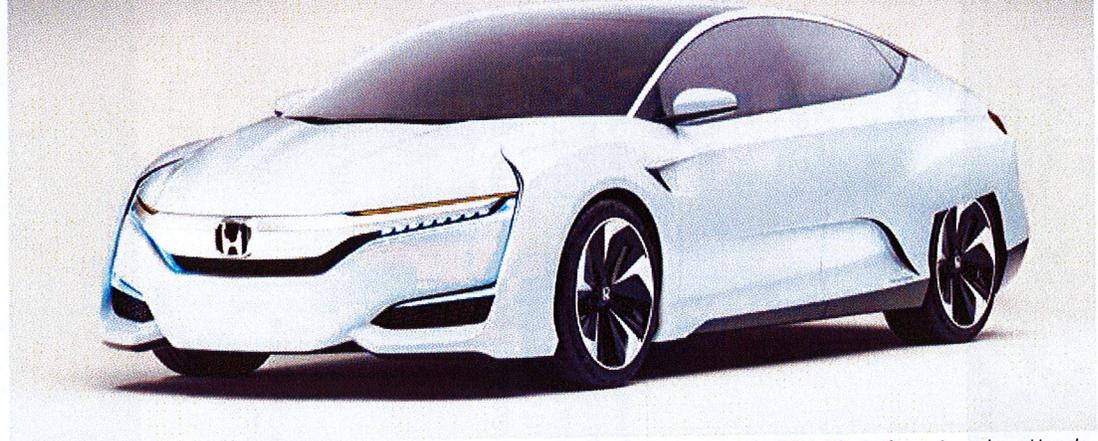
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Tesla Model S electric vehicle.
Photo from Tesla Motors

Hydrogen Fuel Cell Vehicles

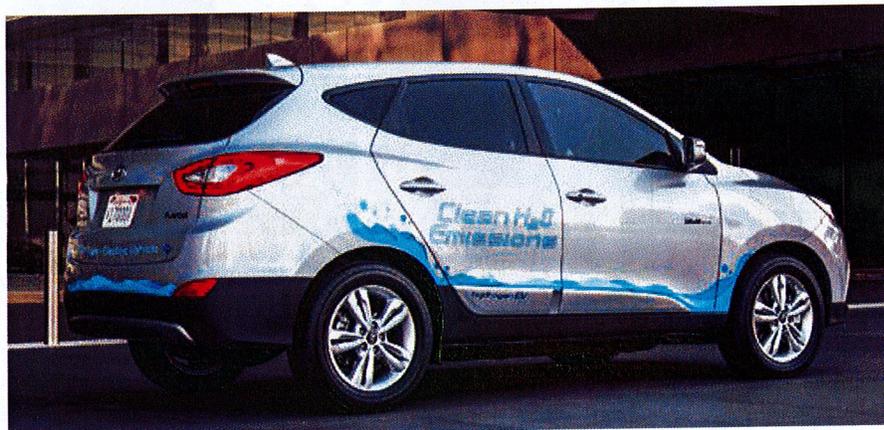


Honda FCV. Photo from American Honda

Hydrogen fuel cell vehicles meet driving range and refueling expectations while producing no tailpipe emissions

An FCEV uses hydrogen as a fuel. In an FCEV, a fuel cell combines hydrogen gas with air to produce electricity, which drives an electric motor to make the car run. Similar to today's gasoline vehicles, FCEVs can have a driving range of more than 300 miles on one tank of fuel and can refuel in less than five minutes. Hydrogen fuel can be sourced from diverse domestic energy sources like natural gas, wind, and solar.

FCEVs are similar to all-electric vehicles because they run on electricity without producing emissions or using combustion engines. Compared to conventional gasoline vehicles, FCEVs can reduce life cycle carbon dioxide and criteria air pollutants up to 50% if the hydrogen is produced by natural gas, or up to 90% if the hydrogen is produced by renewables such as wind and solar. These benefits, combined with quiet operation, low maintenance needs, and high reliability, can make FCEVs an appealing choice.



Hyundai Tucson.
Photo courtesy
of Hyundai Motor
America

Many manufacturers have begun actively developing and producing FCEVs, although they are currently only available in select markets such as California. Toyota has officially started selling its hydrogen fuel cell vehicle (the Mirai), while Hyundai is leasing its fuel cell SUV (the Tucson FCEV). Honda announced it will begin selling a commercial FCEV sedan (the Clarity Fuel Cell) in the spring of 2016 as well. Manufacturers such as General Motors, Mercedes/Daimler, Nissan, Ford, and BMW also have plans to follow suit—all committing to putting FCEVs on the road in the near future.

Fueling infrastructure is an important factor

Efforts are under way to build hydrogen fueling infrastructure to make FCEVs practical for widespread use. Currently, California is leading the nation by establishing publicly accessible hydrogen fueling stations. In the next few years, it is projected there will be more than 50 public stations available nationwide. Visit the AFDC's Alternative Fueling Station Locator (afdc.energy.gov/locator/stations/) to find publicly accessible hydrogen fueling stations.

See page 38 for more information on finding fueling stations.



Toyota Mirai. Photo from Toyota Motor Sales, U.S.A., Inc.

Fuel Cell Electric Vehicle Model	PEM Fuel Cell	Energy Impact Score* (barrels petroleum/yr)	Smog Score**	GHG Score**	Fuel Economy (mi/kg) Combined/City/Hwy	Starting MSRP
Honda FCV	100 kW	-	10	-	59/58/60	-
Hyundai Tucson	100 kW	-	10	10	50/49/51	-
Toyota Mirai	100 kW	-	-	-	66/66/66	-

* Assuming 15,000 miles driven per year. ** 10 = Best.

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Ford Transit available with LPG prep package. *Photo from Ford Motor Company*

Propane is used in vehicles worldwide

Also known as liquefied petroleum gas (LPG), propane is the third most commonly used motor fuel in the world (behind gasoline and diesel fuel). Nearly all of the propane consumed in the United States is produced in North America. Propane's price can be lower and more stable than that of gasoline, especially when a fleet enters a purchase agreement with a fuel provider. State incentives may further improve the return on investment. Propane vehicles are similar to their gasoline counterparts with regard to power, acceleration, and cruising speed. There are two types of light-duty propane vehicles: Dedicated vehicles are designed to run only on propane, while bi-fuel vehicles have two separate fueling systems that enable them to run on either propane or gasoline. The driving range of dedicated vehicles is comparable to that of gasoline vehicles, whereas bi-fuel vehicles have a much longer driving range compared to gasoline vehicles because of their secondary fuel system and fuel supply.



Ford F150 available with LPG prep package. *Photo from Ford Motor Company*

Fueling infrastructure is an important factor

It's important that you know where propane fueling is available before purchasing a propane vehicle. As of December 2015, propane is available at more than 1,530 stations throughout the country. See page 38 for information on finding propane fueling stations in your area.



Ford Transit Chassis Cab available with LPG prep package.
Photo from Ford Motor Company

Propane Vehicle Model	Vehicle Type	Engine Size	Starting MSRP
Ford F-150*	Pickup	5.0L V8	\$26,315
Ford Super Duty F-250*	Pickup	6.2L V8	\$32,385
Ford Transit 150/250*	Van/Wagon	3.7L V6	\$30,960
Ford Transit 250*	Cassis Cab	3.7L V6	\$30,960
Ford Transit Connect*	Van/Wagon	2.5L I4	\$22,675

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** Ford offers a "prep package" for this vehicle. An approved qualified vehicle modifier (QVM) can convert the vehicle to run on propane for delivery through select Ford dealerships, without impacting OEM warranties or service agreements.*

Converting Vehicles to Run on Alternative Fuels

An increasing number of alternative and advanced vehicles are available from major manufacturers, but some conventional vehicles can be converted to run on CNG, propane, or other alternative fuels.

All conversions must meet emissions and safety standards instituted by the EPA, the National Highway Traffic Safety Administration, and relevant state agencies. Major OEMs and their approved operating system suppliers provide systems for new vehicles that are factory equipped to operate on alternative vehicles. Conversions should be performed by an authorized technician associated with a manufacturer that holds all relevant emissions-related certifications and permissions. Find out more about vehicle conversions at afdc.energy.gov/vehicles/conversions.html.



GMC Sierra 2500 HD. Photo from Chrysler Group LLC

Compressed natural gas vehicles offer low fuel costs, among other benefits

CNG is a clean-burning, abundant, and domestically produced source of energy. Traditionally used for cooking and heating our homes, CNG as a vehicle fuel has grown along with the availability of vehicles and new fueling infrastructure. Natural gas vehicles (NGVs) get about the same fuel economy as comparable conventional vehicles on a gasoline gallon equivalent (GGE) basis, and natural gas prices are typically lower than gasoline and diesel prices. The resulting fuel cost savings can help offset the purchase price of a CNG vehicle, and state incentives may provide additional financial assistance (see page 38). NGVs are also similar to their gasoline counterparts with regard to power, acceleration, and cruising speed.

There are two types of light-duty NGVs: Dedicated vehicles are designed to run only on CNG, while bi-fuel vehicles have two separate fueling systems that enable them to run on either CNG or gasoline. Because of CNG's lower energy density, the driving range of dedicated vehicles is typically shorter than that of gasoline vehicles. However, bi-fuel vehicles have a much longer driving range compared to gasoline vehicles because of their secondary fuel system and fuel supply.

While there are a few light-duty vehicle offerings available, NGVs are more common in the medium- to heavy-duty vehicle market.

Fuel from Waste?

Renewable natural gas (RNG), or biomethane, is produced from decaying organic materials, such as waste from landfills, wastewater, and livestock. After impurities are removed, the biogas produced from these operations is ready for use in vehicles or distribution through the existing pipeline system. Because it is produced from

non-fossil-fuel sources, RNG produces far fewer GHG emissions and uses less fossil fuel than conventional natural gas.

Fueling infrastructure is an important factor

When considering the purchase of a NGV, it's important to determine whether CNG fueling infrastructure is available in locations that are convenient to you. As of December 2015, there were more than 890 publicly accessible CNG fueling stations across the country.



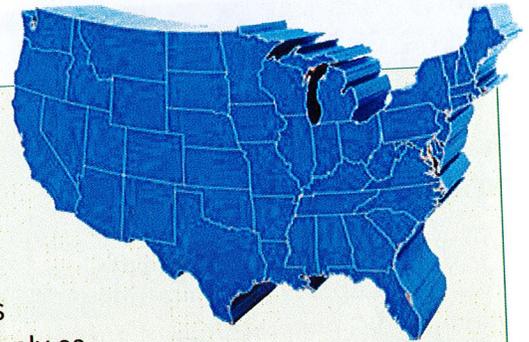
Chevy Impala. Photo from General Motors

See page 38 for more information on finding fueling stations.

Natural Gas Vehicle Model	Vehicle Type	Engine Size	Starting MSRP
Chevrolet Impala	Sedan	3.6L V6	-
Chevrolet Silverado 2500 HD	Pickup	6.0L V8	\$32,955
GMC Sierra 2500 HD	Pickup	6.0L V8	-
Ram 2500	Pickup	5.7L V8	-
Chevrolet Express Prisoner Transport	Van	6.7L V8	-
Chevrolet Express 2500	Van	6.0L V8	-
GMC Savana 2500	Van	6.0L V8	-
Ford F-150*	Pickup	5.0L V8	\$26,315
Ford Super Duty F-250*	Pickup	6.2L V8	\$32,385
Ford Transit 150/250*	Van/Wagon	3.7L V6	\$30,960
Ford Transit 250*	Cassis Cab	3.7L V6	\$30,960
Ford Transit Connect*	Van/Wagon	2.5L I4	\$22,675

This guide contains light-duty vehicles with a Gross Vehicle Weight Rating (GVWR) below 8,500 lbs and medium-duty passenger vehicles with a GVWR below 10,000 lbs. For any vehicles with a GVWR above 10,000 lbs, refer to the Clean Cities Guide to Alternative Fuel and Advanced Medium- and Heavy-Duty Vehicles (afdc.energy.gov/uploads/publication/medium_heavy_duty_guide.pdf).

** Ford offers a "prep package" for this vehicle. An approved qualified vehicle modifier (QVM) can convert the vehicle to run on propane for delivery through select Ford dealerships, without impacting OEM warranties or service agreements.*



State-Specific Fuel and Vehicle Data at Your Fingertips

Quickly get the scoop about alternative fuels and advanced vehicles in your state by visiting the new State Information pages (afdc.energy.gov/states/) on the AFDC. Simply select a state and you will be presented with information about laws and incentives, fueling stations, vehicles, fuel prices, and more—all in one easily accessible place.

The pages also allow you to quickly identify alternative transportation projects happening around the state, locate your nearest Clean Cities coalition, and find other reliable resources. For more information, contact your local Clean Cities coordinator (cleancities.energy.gov/coalitions/contacts/).

Improve the Fuel Economy of Your Vehicle

Ensure that your efforts to improve fuel economy are well-informed with information and tools available at FuelEconomy.gov. There you can compare conventional and alternative fuel vehicles using the Find a Car tool. You can also get extensive information for vehicles of current and past model years on fuel economy ratings, emissions, energy impacts, annual fuel costs, and more.

Driving behaviors significantly impact fuel economy. Follow these tips to begin getting the most out of your vehicle now:

- **Don't drive aggressively:** Speeding and rapid acceleration and braking lowers gas mileage.
- **Observe the speed limit:** Fuel economy generally decreases at speeds above 50 mph.
- **Remove rooftop boxes and racks when not in use:** Increased drag lowers fuel economy.
- **Remove excess weight:** Don't keep unnecessary items in your vehicle.
- **Avoid excessive idling:** Turn off the engine when parked.
- **Use cruise control on the highway:** Keeping a constant speed saves gas, in most cases.
- **Keep the vehicle's engine tuned and tires properly inflated.**
- **Use overdrive gears:** When the car's engine speed goes down, so does the amount of gasoline used.

For more information, visit FuelEconomy.gov's "Driving More Efficiently" page (fuelEconomy.gov/feg/driveHabits.shtml).

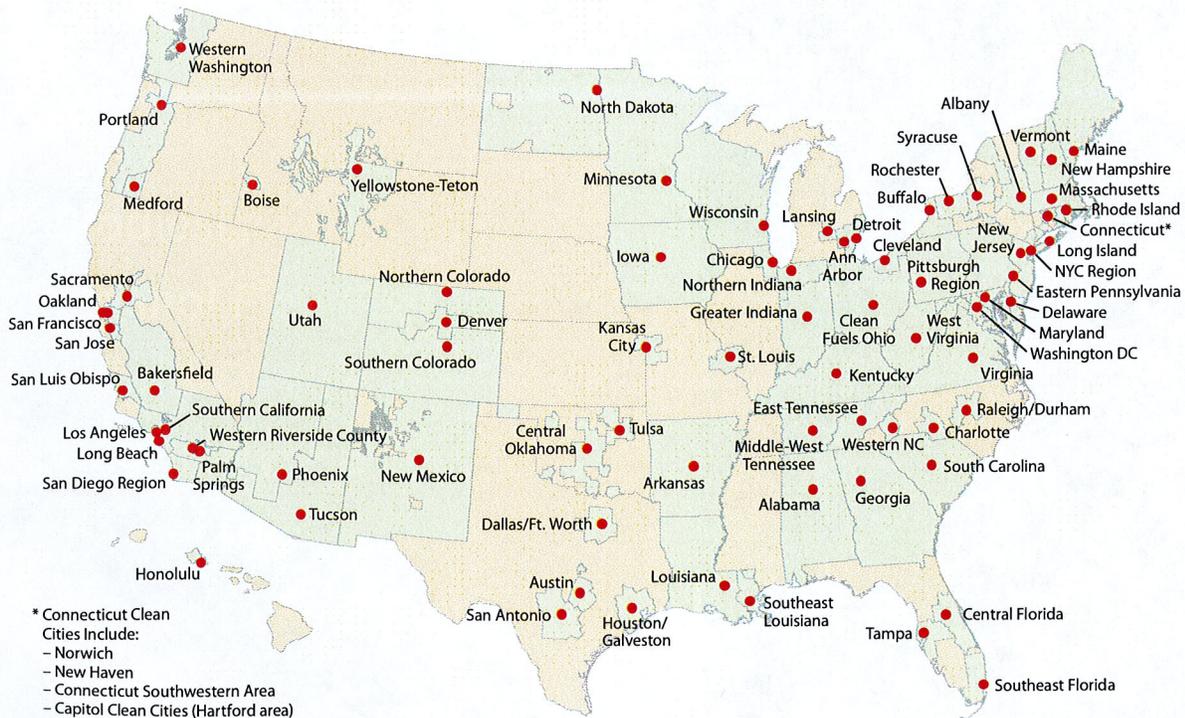


U.S. Department of Energy

Clean Cities advances the nation's economic, environmental, and energy security by supporting local actions to cut petroleum use in transportation. A national network of nearly 100 Clean Cities coalitions brings together stakeholders in the public and private sectors to deploy alternative and renewable fuels, idle-reduction measures, fuel economy improvements, and advanced transportation technologies.

For more information, visit:

- cleancities.energy.gov
- fueleconomy.gov
- afdc.energy.gov





Chevrolet Silverado. Photo from General Motors

U.S. DEPARTMENT OF
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Office of Energy Efficiency and
Renewable Energy; NREL is
operated by the Alliance for
Sustainable Energy, LLC.



U.S. Department of Energy



City of Fort Bragg

416 N Franklin Street
Fort Bragg, CA 95437
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Text File

File Number: 16-109

Agenda Date: 3/28/2016

Version: 2

Status: Mayor's Office

In Control: City Council

File Type: Proclamation

Agenda Number: 1D.

Proclamation of the Fort Bragg City Council Expressing Continuing Support and Admiration for the Town of Otsuchi, Japan on the Occasion of the Inauguration of a New Community Facility at Namiita Beach

PROCLAMATION

CONGRATULATING AND HONORING THE CITIZENS OF OTSUCHI, JAPAN ON THE DEDICATION OF THEIR NEW “REMEMBER HOPE NAMIITA BEACH VILLAGE” ON APRIL 17, 2016

WHEREAS, the cities of Fort Bragg and Otsuchi, Japan became sister cities in 2005, after several years of participation in a student exchange program; and

WHEREAS, many strong and lasting friendships have developed as a result of the cultural exchange program between the two sister cities; and

WHEREAS, on April 17, 2016, the citizens of Otsuchi will dedicate the opening of a new “Remember HOPE Namiita Beach Village” facility to bring energy and life back to the beach which was heavily damaged by the earthquake disaster; and

WHEREAS, the Fort Bragg City Council congratulates the City of Otsuchi on its ability to rebuild what was once a beautiful white sand beach with a new Beach Village; and

WHEREAS, the City of Fort Bragg humbly offers pieces of beach glass from its own Glass Beach, a former dump site that is now a world-famous visitor attraction, as a symbol of hope and affirmation for the efforts to restore Namiita Beach to its former beauty; and

WHEREAS, this beach glass is testament to the strength and resilience of the people of Otsuchi and the lasting friendship that exists between our two communities; and

WHEREAS, the Fort Bragg City Council regrets not being able to attend the inaugural ceremony to offer this glass in person and we hope to visit Otsuchi and the new “Remember HOPE Namiita Beach Village” very soon.

NOW, THEREFORE, I, Dave Turner, Mayor of the City of Fort Bragg, on behalf of the entire City Council, do hereby congratulate the Mayor and citizens of Otsuchi on the “Remember HOPE Namiita Beach Village” facility, and affirm our strong support for the Fort Bragg-Otsuchi Cultural Exchange Program.

SIGNED this 28th day of March, 2016.

DAVE TURNER, Mayor

ATTEST:

June Lemos, City Clerk
No. 06-2016



City of Fort Bragg

416 N Franklin Street
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Text File

File Number: 16-106

Agenda Date: 3/28/2016

Version: 1

Status: Business

In Control: City Council

File Type: Staff Report

Agenda Number: 6A.

Receive Council Ad Hoc Committee Report on Interviews with Lodging Owners; Receive Committee Recommendations Regarding Potential Ballot Measure to Increase Fort Bragg's Transient Occupancy Tax (Bed Tax) Rate and Modifications to the City's Marketing and Promotions Program; and Provide Direction to Staff



AGENCY: City Council
MEETING DATE: March 28, 2016
DEPARTMENT: Administration
PRESENTED BY: Turner/ Peters/
Ruffing

AGENDA ITEM SUMMARY REPORT

TITLE:

RECEIVE COUNCIL AD HOC COMMITTEE REPORT ON INTERVIEWS WITH LODGING OWNERS; RECEIVE COMMITTEE RECOMMENDATIONS REGARDING POTENTIAL BALLOT MEASURE TO INCREASE FORT BRAGG'S TRANSIENT OCCUPANCY TAX (BED TAX) RATE AND MODIFICATIONS TO THE CITY'S MARKETING AND PROMOTIONS PROGRAM; AND PROVIDE DIRECTION TO STAFF

ISSUE:

At the February 8, 2016 City Council meeting, an ad hoc committee comprised of Mayor Dave Turner and Vice Mayor Lindy Peters was formed to explore the possibility of a ballot measure to increase the transient occupancy tax (TOT) rate to generate revenue for activities that will help expand Fort Bragg's slice of the California tourism business. TOT is a surcharge imposed on visitors staying at lodging facilities. The committee was tasked with talking to local lodging owners and operators to receive feedback on the possibility of a TOT increase.

In late February and early March, the committee met with owners and/or operators of nearly all of Fort Bragg's 23 lodging establishments. This agenda item allows the ad hoc committee to report back to the entire Council on its findings and recommendations.

RECOMMENDED ACTION:

1. Provide direction to the ad hoc committee and staff regarding drafting two ballot measures (for the November 2016 ballot) for the Council's consideration with the following key components:
 - A general tax measure that increases the TOT rate in the City of Fort Bragg to 12%, effective April 1, 2017. The TOT rate is currently 10%, meaning that the proposed measure, if passed, would generate an additional 2% in revenue per year.
 - A companion non-binding advisory measure that informs the Council, if the voters approve the general tax measure, about how the revenues generated by the TOT increase should be used in relation to the following purposes:
 - 1% (i.e., one-half of the revenues) to substantially increase promotions and marketing for Fort Bragg;
 - 0.5% (i.e., one-quarter of the revenues) to enhance Coastal Trail maintenance and security;
 - 0.25% (i.e., one-eighth of the revenues) to support establishment of the Noyo Center Oceanarium (also known as the Whale House or Discovery Center) as a premiere visitor attraction; and
 - 0.25% (i.e., one-eighth of the revenues) to undertake special projects that support tourism and benefit the community, including but not limited to repair and enhancement of local athletic fields.
2. Provide direction to staff to initiate the actions necessary to re-form the Fort Bragg Promotions Committee as a Council-appointed advisory committee with seats assigned to specific business

sectors; and to prepare to take responsibility for implementation of marketing and promotion activities in-house effective July 1, 2016.

ALTERNATIVE ACTION(S):

1. No action. Under this alternative, a TOT measure would not be placed on the November 2016 ballot.
2. Continue action on the matter and request additional information.
3. Provide direction to staff to proceed with drafting of ballot measure as recommended by the ad hoc committee, but with the increase identified as a special tax rather than a general tax measure.
4. Provide alternative direction regarding changes to the Fort Bragg Promotions Committee.

ANALYSIS:

Summary of lodging interviews

The Council's ad hoc committee, accompanied by the City Manager, spent the better part of four days visiting lodging establishments and talking with their proprietors or site managers about a number of issues. Discussions were held with representatives from a total of 22 of the 23 lodging establishments in Fort Bragg. While the conversations were informal and free-ranging, the committee attempted to ask each owner the following questions:

1. Would you consider supporting a TOT increase for:
 - ~ Coastal Trail maintenance and security?
 - ~ Marketing and Promotion to Visitors?
 - ~ Whale House on Coastal Trail?
 - ~ Playing field upgrades (to attract tournaments)?
2. If the tax were used to support your priorities, would you support a 2% increase?
3. What are your thoughts regarding visitor promotion/ marketing of Fort Bragg?
 - ~ Are you aware of the work of the Fort Bragg Promotion Committee?
 - ~ Are there other ways in which the City could help your business?
 - ~ Any other suggestions for marketing and promotions?
4. Other issues or concerns?

Attachment 1 is a matrix that summarizes the responses received from lodging owners.

Overall, the ad hoc committee heard support from local lodging establishments for a TOT increase. Of the 22 lodging establishments surveyed, representatives of 16 establishments supported an increase, five were not supportive, and one was undecided but leaning towards supporting it. The support was qualified insofar as nearly all of the respondents wanted to ensure that the revenues collected were used for the specified purposes. There was a call for transparency and reporting on how funds are spent. Specific suggestions included the following:

- ~ Provide an annual report on expenditures;
- ~ Start implementation of the tax after the winter season;
- ~ Start with a 1% increase and then increase to 2%;
- ~ Exempt Bed & Breakfast establishments from the increase.

There was near unanimity among lodging that more marketing and promotion of Fort Bragg is needed. Feedback on the fortbragg.com website was generally negative. Nearly half of the respondents either were unaware of the Fort Bragg Promotion Committee or had misconceptions about it. Suggestions included:

- ~ Fix the website; “website should be amazing!”
- ~ Market the coastal trail; “who knows about it?”
- ~ Define Fort Bragg’s brand- what makes this place so special (quiet; peaceful; uncrowded; nature; ocean; beauty; hiking and biking; coastal trail; whales; history; weather; Skunk; sport fishing)
- ~ Target markets: Sacramento Valley and north to Chico and Redding; Bay Area; families; retirees; outdoor enthusiasts; techies; hipsters

The ad hoc committee believes that, with some exceptions, Fort Bragg lodging owners/operators would be supportive of a 2% increase in the TOT rate, provided that the revenues generated are used for the following purposes:

- ~ 1% to substantially increase promotions and marketing for Fort Bragg;
- ~ 0.5% to enhance Coastal Trail maintenance and security;
- ~ 0.25% to support establishment of the Noyo Center Oceanarium (i.e., the Whale House) as a premiere visitor attraction; and
- ~ 0.25% to undertake special projects and activities that support tourism and benefit the community, including but not limited to repair and enhancement of local athletic fields.

A 2% increase in the TOT rate would generate nearly \$400k per year in additional revenue. If allocated in the amounts recommended by the committee, this would mean an additional \$200k per year for marketing and promotion (in addition to the \$70k currently allocated), which could include efforts to improve the City’s website. Approximately \$100k would be available for the Coastal Trail, helping to offset the costs of an additional Maintenance Worker position in the Public Works Department and costs associated with increased patrols and calls for service by the Police Department. Approximately \$50k would be dedicated to the Noyo Center as a local funding commitment that is necessary in order to attract the large foundation funding necessary to complete the Oceanarium. And the remaining \$50k would be available for special projects, including repair and maintenance of the school district’s athletic fields.

The ad hoc committee recommends that the measure be put forth as a general tax, as opposed to a special tax, because a general tax can be passed by 50%+1 of the voters. A special tax requires a 2/3 majority vote to pass. A “general tax” is defined as any tax imposed for general governmental purposes. See Cal. Const., art. XIIC, §1(a). A “special tax” is defined as any tax imposed for specific purposes, including those taxes that are imposed for specific purposes where the revenues are placed in the general fund. See Cal. Const., art. XIIC, §1(d).

The practice of presenting a general tax measure for imposition of a tax that can be used for general governmental purposes, along with a companion non-binding advisory measure whereby the voters can express their preference for the expenditure of those funds for specific purpose, raises the prospect of an argument that the tax measure is really a special tax cloaked as a general tax and thus ought to be subject to the 2/3rd voter approval requirements. However, in *Coleman v. Santa Clara County* (1998) 64 Cal. App. 4th 662, the Court allowed the local agency to place a general tax on the ballot along with a non-binding, advisory measure stating the voters’ preferences on how the revenue raised by the general tax should be spent noting that (a) the proceeds of the tax were deposited into the local agency’s general fund; (b) the measures were

presented to the voters as two separate and distinct measures; and (c) the advisory measure did not bind the local agency in making decisions about how to spend the general tax. Accordingly, the TOT measure and non-binding advisory measure would need to conform to these principles in order to maintain the tax measure's status as a general tax.

The ad hoc committee's recommendations for a TOT ballot measure are as follows:

- 1. A general tax measure should be placed on the November 2016 ballot which, if approved by the voters, would increase the City's TOT rate to 12% of the room rate.**
- 2. The ballot measure should establish an effective date for the TOT increase of April 1, 2017. This would give lodging establishments an opportunity to ease in to the new rates, and would start the collection as business picks up for the summer season.**
- 3. The ballot measure should identify specific requirements for reporting on expenditures of the new revenues to ensure transparency and accountability.**
- 4. A companion non-binding advisory ballot measure should also be placed on the November ballot, whereby the voters can inform the Council about how the new TOT revenues should be used in relation to the purposes listed above.**

In addition to the ballot measure, the ad hoc committee has prepared a recommendation regarding the City's promotion and marketing efforts. After talking with lodging owners, it was clear that it is time for a shift in the City's marketing and promotion program.

Since 1999, the City's promotional efforts have been overseen and, in large part, implemented by the Fort Bragg Promotion Committee (FBPC). The FBPC has created an annual marketing plan and advised the City on how to spend the funds that are earmarked for marketing and promotion. Initially, the FBPC was appointed by the City Council with each Councilmember nominating one member. Then, in 2010, the Council contracted with the Mendocino Coast Chamber of Commerce to administer the FBPC, and the FBPC morphed into a subcommittee of the Chamber. With the administrative support of Chamber staff, the FBPC has continued to prepare and implement an annual marketing plan, but in recent years progress on some items has been hampered for a variety of reasons.

The ad hoc committee believes that it is time for the City to recommit itself to a strong and effective marketing and promotions program. Regardless of whether a TOT measure is put to the voters, the City should dedicate additional staff resources to supporting the FBPC and to development and implementation of a marketing plan. The committee has talked this over with the City Manager and she believes that, with the recent reorganizations in the Community Development Department and the Administrative Services Department, an effective staff team can be created to oversee marketing and promotions utilizing existing staff resources. Bringing the FBPC back in-house also creates an opportunity to revitalize the committee and recruit additional members. It is hoped that the existing FBPC members would continue to serve.

Specific recommendations of the ad hoc committee are as follows:

- 1. The City should work with the Chamber of Commerce to smoothly transition the FBPC and the City's marketing and promotion program back in-house, effective July 1, 2016.**
- 2. A new FBPC should be established with seats assigned to various business sectors and a majority of seats held by lodging (one seat each to: B&B; motel-chain; local motel; unassigned lodging; restaurant; downtown business; visitor attraction).**
- 3. A representative of the Chamber of Commerce and a representative of the Mendocino County Tourism Commission should be requested to sit on the FBPC as non-voting members.**

4. The City Council should appoint members to the FBPC and the committee should operate in accordance with Brown Act procedures.
5. The FBPC should have regular quarterly meetings, as well as special meetings on an as-needed basis.
6. Each year, the FBPC should present an annual report and a marketing plan for Council approval.
7. The City Manager should be directed to assign appropriate staff resources to support the FBPC, to implement the marketing program, and to oversee the work of consultants and contractors.

FISCAL IMPACT:

If the Council moves forward with the ballot measures, there will be some staff and attorney costs associated with preparation of the measures. There would also be costs associated with the election. Because the election would be consolidated with the general statewide election, the City Council election, and possibly other local measures, the costs are estimated to be in the \$5,000 range. A 2% TOT increase would yield an estimated additional \$400k per year in revenue.

IMPLEMENTATION/TIMEFRAMES:

If the Council chooses to move forward with the ballot measures, the specific language will be drafted and the measures will be brought forward for Council consideration. The last day to call the election for the measures is no less than 88 days prior the November 8, 2016 general election. Thus, the deadline for transmitting a ballot measure to the County Elections Office is in mid-August. It is anticipated that the measure would be brought back for Council action well in advance of the deadline.

ATTACHMENTS:

1. Matrix summarizing results of interviews with Fort Bragg lodging owners and operators

NOTIFICATION:

1. Fort Bragg Lodging Owners (via email)
2. Fort Bragg Promotion Committee
3. Chamber of Commerce, Executive Director
4. Mendocino County Tourism Board, Executive Director

City Clerk's Office Use Only

Agency Action <input type="checkbox"/> Approved <input type="checkbox"/> Denied <input type="checkbox"/> Approved as Amended Resolution No.: _____ Ordinance No.: _____ Moved by: _____ Seconded by: _____ Vote: _____ <input type="checkbox"/> Deferred/Continued to meeting of: _____ <input type="checkbox"/> Referred to: _____
--

	type of lodging	would you support a 2% TOT increase	are your customers concerned about TOT	should we be doing more marketing & promotion	FBPC; fortbragg.com website	what draws your visitors to Fort Bragg	how's business	are you satisfied with police response	other concerns	suggestions
Weller House	B&B	no	B&B's have a price point; tax eats into my profit	no; individual purposeful marketing is needed	hokey; need stats; coastal trail-who knows about it?	what they don't have there is what we do have here	B&Bs are struggling; five are for sale		derelect housing on Main Street	should target retreat, conference market; make alliances with silicon valley
Surf Motel	motel	yes; if money goes to marketing	no	yes; tv, magazines, websites, show people what we have	not aware of FBPC	coast	last few months very bad	no, poor follow-through	workforce is a challenge	tell visitors to not take glass; advertise coastal trail
Harbor Lite	motel	yes; specify what it should be used for; provide annual reports	no: Fort Bragg has some of lowest TOT in state. 13-14% is norm	yes; need coordination with VMC	is FBPC still a partnership with Chamber?		Jan-Feb rain a problem	yes	workforce a challenge	need more reasons for people to come that aren't date specific; access trails to harbor; fix playing fields
Seabird	motel-chain	no; should use existing TOT for promotion; shouldn't have built trail if you can't afford it		yes; coastal trail needs promotion, promote Fort Bragg	not aware of FBPC		online travel agencies getting big cut	yes	need to address homeless issues; increase occupancy rates	coastal trail needs promotion
Colombi's	motel	yes- put it on ballot	yes	yes	not aware of FBPC until last night (Chamber mtg)			yes	need more things for people to do; people need to feel safe; be more pro-business	concerts; more shopping; motocross events; healing/massage & meditation; nursing program
Motel 6	motel-chain	yes		yes		repeat customers; skunk train, glass beach, abalone, mendocino				
Travelodge	motel-chain	yes		yes	not aware of FBPC			yes!	need more things for people to do	fix playing fields

			are your customers concerned about TOT	should we be doing more marketing & promotion	FBPC; fortbragg.com website	what draws your visitors to Fort Bragg	how's business	are you satisfied with police response	other concerns	suggestions
	type of lodging	would you support a 2% TOT increase								
Emerald Dolphin	motel	yes; don't think a 2% increase would turn anyone away	no; Fort Bragg is at lower end for bed tax	yes	not impressed; all hotels should be on there in same capacity. Website should be amazing	repeat business; they can just breathe; skunk train, party boats		yes	façade improvements- appearance; need more things to do; skunk train	colorful history; sporting events; videos go viral; little clips of movies shot here; Santa Cruz boardwalk?
Oceanside Suites	motel	yes; 1% at a time								
Ebb Tide Lodge	motel	yes; 1% at a time		yes	vaguely familiar with FBPC	skunk train, nature, beaches	winter is very dead		need year-round business; people run out of things to do	target kids and families; have them stay longer; special events help in off
Best Western Vista Manor	motel-chain	maybe; need to ensure it is used for promotion		yes	nobody has ever told me anything about the FBPC	repeat visitors; quaint, quiet, peaceful. People come to relax. Nature a big draw. Hiking, biking a big thing.	full in peak season; winter is brutal	yes	collecting TOT has costs to lodging if payment is by credit card	might not want to change things too much
Beachcomber	motel	yes; if it is used for specific things- need binding policy	no							market coastal trail; whales; wine industry; spread word about what makes area special; generate loyalty to area- define brand of FB; OJ Park is an enchanted forest; define brand of Fort Bragg; people expect history; generate
Surf and Sand	motel	yes; if it is used for specific things- need binding policy	no		thought we didn't have FBPC b/c money going to Chamber; "don't care for website"; social media a little better					
Beach House	motel	yes; if it is used for specific things- need binding policy	no	yes; should use Scott Schneider (in-house talent)		silence and tranquility; coastal trail; whales; lots to discover, explore		yes; we love the police; heard they need a raise	homeless people	loyalty to area

		would you support a 2% TOT increase	are your customers concerned about TOT	should we be doing more marketing & promotion	FBPC; fortbragg.com website	what draws your visitors to Fort Bragg	how's business	are you satisfied with police response	other concerns	suggestions
Glass Beach Inn	B&B	yes! Marketing needs to be well coordinated		yes; I want Scott Schneider back	FBPC needs to be abolished- its not working			yes	homeless people; lighting at night; need meeting facility instead of tents	list of everything to do. Bluff trails, music, galleries; events in off-season; retreat and conference center; see what other small communities have done
The Atrium	B&B	no (probably)		yes; have PR company do work; professional agency with a strategic plan	website is terrible; having Chamber administer promotions is iffy; getting volunteers to work difficult; need one person to be king of website; need good content;	uncrowded coastal destination; value			City needs to be more engaged with lodging. Skunk train? Derelict house next to Gray Whale Inn; signage; need to raise the bar-should have more value for rooms	PR; get word out to wealthy techy people; brand FB-uncrowded coastal destination; online forum for lodging owners; have Councilmember engaged with lodging
Living Light Inn	B&B	yes; what will happen with money; how would marketing firm be chosen	no	yes		Nature, air, trails, beach, weather, breathe, hear the ocean; get away from the City			replace picnic tables at Bainbridge?	videos; webcam; add picnic tables at north end of coastal trail; Problem if too many people come; weather is a draw; Fort Bragg is more real than Mendocino

			are your customers concerned about TOT	should we be doing more marketing & promotion	FBPC; fortbragg.com website	what draws your visitors to Fort Bragg	how's business	are you satisfied with police response	other concerns	suggestions
type of lodging	would you support a 2% TOT increase									
Oceanview Lodge	motel	no- owner; yes- manager need to hire the right PR agency	yes, guests ask about TOT. San Francisco, Sonoma Co have higher rates.	yes	don't know	Lots of returning guests. Once you come here, you fall in love. FB- Best kept secret on the coast. Beauty, ocean	?	?	people should stay longer; why are we paying for playing field upgrades?	have people stay for 3 days- give them something to do; events are good (not tournaments); State Parks should have doggie bags; fix haul road
Holiday Inn Express	motel-chain	yes; 1% don't mind; 2% seems a little steep	no	yes; didn't like favoritism of BID	don't know	coastline; guest book online- brand name		yes		local cruise ships; more local attractions would be good; promote tournaments; day trips exploring the coast
Grey Whale Inn	B&B	yes; I like paying taxes; special TOT exemption for B&Bs?	?	yes; about how to effectively spend money to get right people here	?	Fort Bragg is a really inviting place; not manicured like Mendocino; fusion-cultural renaissance; friendly; fusion/cultural renaissance in FB		?	Marijuana industry attracts punks	historic B&B district; respect the past- embrace the future; have MCHC do trail maintenance?; living history; marijuana tourism
Super 8	motel-chain	yes	no; our town is a lot lower than other towns	yes	uses fortbragg.com to see what events are coming up.	glass beach; Mendocino a draw, but not kid friendly; hiking and biking	?	yes; Police patrol around Perkos once in a while	people dashing across Hwy 1 to south trail; homeless	maps of hiking and biking trails; stormwatch packages; whales all winter long; promote fishing charters; events help

			are your customers concerned about TOT	should we be doing more marketing & promotion	FBPC; fortbragg.com website	what draws your visitors to Fort Bragg	how's business	are you satisfied with police response	other concerns	suggestions
Country Inn	B&B	no; might put us out of business	customers might be willing to pay it	yes	website could be modernized	Mendocino- bargain hunting; repeat customers; Mendo is like museum- FB, people live here; seeing more hipsters who want to be able to walk to town & interact with other guests	difficult year, bad winter; skunk train and crab season hurting us	yes; very responsive and helpful	traffic speeds-enforcement; noise; homeless issues; abandoned buildings; downtown seems rundown	coastal trail signage; have TOT measure take effect at beginning of summer;



Chamber of Commerce

M E N D O C I N O C O A S T

On behalf of the Mendocino County Chamber of Commerce Board of Directors, I want to express our concern regarding the fiscal impact of the proposed changes to the Fort Bragg Promotion Committee.

Currently, the City contracts with the Chamber to administer the FBPC, which prepares and implements an annual marketing plan. The contract is for \$12,000 annually. The City is now proposing to move the Committee back in-house effective July 1st.

Historically, the Chamber and the City have worked together to support the local business community and we want to continue that positive relationship. We are constantly looking at every avenue and possibility to promote business in our City. We understand that every citizen and business derives direct benefits from a City that supports a growing economy. We play a major role in this and would like to work even more with the City in these efforts. We will support whatever the City's final decision is on this issue; however the loss of \$12,000 of annual funding to the Chamber would be significant and could greatly affect the more than 200 business members within the Fort Bragg City limits.

The Chamber empowers the local business community. More than half of our members are within the city of Fort Bragg. We promote, support and improve the business and economic climate through our monthly events, training as well as connecting businesses with local resources. Our Annual Business Expo gives businesses, non-profits and cottage industries that don't have storefronts the opportunity to have exposure as well as networking opportunities with other businesses. We support many non-profits in the City with their fundraising and events, which has a direct impact on our local economy.

The Visitor Center maintained by the Chamber sees nearly 10,000 visitors annually. Over 11,000 business referrals were made last year. Our Visitor's Guide has a distribution of 90,000 with the online version bringing an additional 90,000 views.

The Chamber organizes and promotes the Mendocino and Fort Bragg Whale Festivals as well as providing promotion and support for the Little River Whale Festival. These events bring thousands of visitors into the area each year. This work is all done in-house, within our budget and without having to contract out of area.

The Film Commission is an unfunded arm of the Chamber that has a very large fiscal impact on the County. There is room for growth and this is something we look forward to continuing in order to help our city to thrive economically. The Chamber is proud to carry this designation, as the official Mendocino County Film Commission. Need For Speed brought in nearly \$3 million. Nearly all of the crew stayed in Fort Bragg lodging and patronized our local businesses. Filming also leaves a footprint after the production leaves, as people see the Mendocino Coast and want to come here.

Regardless of whether the City does pull the FBPC back under direct administration we are asking that the City consider increasing the funding to the Chamber so that we may continue to promote, support and improve the business and economic climate in Fort Bragg. In past years, the City funded as much as \$30,000 to the Chamber. This shows Fort Bragg's business community your support and understanding of what a significant role a Chamber of Commerce plays. We respectfully request that the City considers continuing to provide funding so that we can properly staff the Chamber and potentially grow the Film Office. In addition, we ask that the City continues to allocate the current percentage of the TOT.

Thank you in advance for your consideration and your continued support.



Chamber of Commerce

M E N D O C I N O C O A S T

Nancy Swithenbank, Board Chair

Tom Yates, Past Chair
Owner, KOZT

Joshua Coate, Board Treasurer
Manager, NCBC Tap Room

Denise McNicol, Director
Owner, Headlands Inn

Jeanette Colombi, Director
Owner, Colombi Motel

Greg Burke, Director
Managing Broker and V.P. Mendo Realty, Fort Bragg

Tara Estes, Director
Owner, The Chair/Salt Girl

Ray Alarcon, Director
Owner, Alarcon Insurance

Paul Clark
Owner/Broker C21

Douna Dooley
Co-Owner, Sport Chrysler, Jeep, Dodge

Tom Honer
Owner, Harvest Market

Myles Anderson
Anderson Logging, Inc.

Sharon Davis
CEO, Mendocino Coast Chamber of Commerce

Jeremiah K. Murphy, CPA
Owner, Jeremiah K. Murphy, CPA



Chamber of Commerce

M E N D O C I N O C O A S T

MCCC Statistics

Average nearly **10,000 visitors to the Visitor Center** annually.
We made over **11,200 business referrals** in 2015.

Visitor Guide has a distribution of **90,000** with the online version bringing an **additional 90,000 views**.

Distribution sites include:

- San Francisco - Pier 39
- Santa Rosa
- Pismo Beach
- Mendocino countywide locations
- eVisitors Guide
(additional 90,000 impressions)
- AAA Offices
- All MCCC Info Packets

The Mendocino Coast Visitors Guide contains:

- Detailed street maps of each coastal community as well as Anderson Valley
- Location markers to create redundant coverage for local businesses
- Information on the Coastal Trail, Parks, Beaches, Wellness, and other attractions
- Wine map and information on our Film Office
- Year-round Festivals
- Facts and history
- Business Directory

The Chamber organizes and promotes the Mendocino and Fort Bragg Whale Festivals as well as providing promotion and support for the Little River Whale Festival. These events bring **thousands of visitors** into the area each year.

Our social media presence has grown significantly over the past year and we utilize this to support, highlight and promote our members. The Chamber Facebook page has 2,000 likes and an email list of over 1,000.

The Film Commission is an unfunded arm of the Chamber that has a very large fiscal impact on the County. Need For Speed brought in nearly **3 million**. Filming also leaves a footprint after the production leaves, as people see the Mendocino Coast and want to come here.

6A) I am in favour of an increase in the transient occupancy tax (TOT). The current tax rate is artificially low, and does not reflect industry standards in tourism; concerns that a higher tax rate would drive potential guests away are specious. Fort Bragg as a whole is suffering from delayed maintenance and budgetary issues, especially as the town is attempting to expand, rehabilitate, and maintain many facilities such as the Coastal Trail, and it is critical to keep revenues up in order to support a high quality of life for current guests, visitors, and future generations. A drive toward short-sighted thinking in the name of expedience or reelection concerns reflects poorly upon the Council and we must think in the long term. A higher tax will allow us to improve the physical condition of the city, the services available, and the options for future developments, something benefits not just residents but those who wish to visit. Given that the matter under consideration is simply a ballot measure, not a tax increase from the Council itself, it's clear that this must be put to the ballot to allow voters to express their opinion on the issue.

6B) I am opposed to the use of Segways and similar devices on the Coastal Trail. I feel they would be detrimental to the experience of users, who would prefer a more serene environment — Segways are distracting, highly disruptive, noisy, and unpleasant to be around for many current users of the trail. Moreover, they could pose access barriers for disabled people, older adults using canes and walkers, parents with strollers, and other people with mobility impairments who lack the agility to move around such devices, especially when they are operated by inexperienced users who cannot adequately control or stop them. I am also disturbed by the potential precedent of allowing commercial uses of the Coastal Trail: I feel that it should be preserved and enshrined as a public, noncommercial, open access space available to all, and allowing a commercial use permit creates the risk that future permits will continue to encroach on recreational enjoyment of the trail. I urge you to reject any and all proposals for commercial use permits.

Regards,

s.e. smith

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[www.realsmith.com](http://www.realsmith.com)

Editor in Chief, Global Comment | [www.globalcomment.com](http://www.globalcomment.com)

Social Justice Editor, xoJane | [www.xojane.com](http://www.xojane.com)

this ain't livin' | [www.meloukhia.net](http://www.meloukhia.net)

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PO Box 2764

Fort Bragg, California 95437

Council I would strongly request you consider a better and actual share of funds for more than City Hall. The fact City Hall is to claim need of more monies for staff and now you want to take on the marketing of the area and the funds? Will this take away the small amount of funds the Chamber of commerce already gets? I do not like the conglomeration of money and community function under the grips of city hall. I also would strongly request the field and community programs money be shared with the MCPR for more scholarships and work for field upgrades. I also would strongly request the 5<sup>th</sup> level that would give Fort Bragg a small pot of funds for emergency shelter needs be it EWS or house/apartment fires and other things that happen in life that a local social safety net could and would be of value. This I would like to see the Mayor have freedom to use as he/she see's fit but also account for the funds and publically show the use of the funds as to determine the overall effective and compassionate use or not of funds. That could be a double edge sword for any Mayor as squandering and wasteful spending could be done but that would also be a political death upon a re-election. I hope you will honestly consider and share these funds with more than City Hall and Noyo Center. If not and if this attempted TOT allocation stays as it is currently written public opinion will be on the side of NO vote. Thank You Eric Dwyer 3/28/2016

MY change of direction request is a follows...

☒ .75% (i.e., less than one-half of the revenues) to substantially increase promotions and marketing for Fort Bragg; specifically given to the Chamber of Commerce (ABC) marketing group, NOT CITY HALL

☒ 0.5% (i.e., one-quarter of the revenues) to enhance Coastal Trail maintenance and security; City Hall funds

☒ 0.25% (i.e., one-eighth of the revenues) to support establishment of the Noyo Center Oceanarium (also known as the Whale House or Discovery Center) as a premiere visitor attraction; and Noyo center funds NOT CITY HALL

☒ 0.25% (i.e., one-eighth of the revenues) to undertake special projects that support tourism and benefit the community, including but not limited to repair and enhancement of local athletic fields. --Specifically funds to go to Mendocino Coast Park and Rec. Dept. NOT CITY HALL, NOT CV STAR CENTER.

0.25% for the formation of an Emergency shelter account under the Mayors direction. Money for the EWS and or shelter emergency for whatever life may have as a security net. This could be and would be a social service funding for the City as not to have to rely on the County BOD or Red Cross or other NGO groups may or may not be Hospitality House group and or Coast Hotel wellness center group to cover under and unfunded projects, could be a funding source for the Faith community group to run a EWS location I would think this would be as need is required but a funding source needed none the less...



# City of Fort Bragg

416 N Franklin Street  
Fort Bragg, CA 95437  
Phone: (707) 961-2823  
Fax: (707) 961-2802

## Text File

File Number: 16-111

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**Agenda Date:** 3/28/2016

**Version:** 1

**Status:** Business

**In Control:** City Council

**File Type:** Staff Report

**Agenda Number:** 6B.

Receive Report and Provide Direction to Staff Regarding Use of Electric Personal Assistive Mobility Devices on the Fort Bragg Coastal Trail



**AGENCY:** City Council  
**MEETING DATE:** March 28, 2016  
**DEPARTMENT:** Public Works  
**PRESENTED BY:** Tom Varga

## AGENDA ITEM SUMMARY REPORT

**TITLE:**

**RECEIVE REPORT AND PROVIDE DIRECTION TO STAFF REGARDING USE OF ELECTRIC PERSONAL ASSISTIVE MOBILITY DEVICES ON THE FORT BRAGG COASTAL TRAIL**

**ISSUE:**

An Electric Personal Assistive Mobility Device (EPAMD) is a self-balancing, non-tandem, two-wheeled vehicle with a low-powered electric motor. EPAMDs are commonly known as “Segways,” the brand name of one of the commercial products. A local entrepreneur has applied for and received a business license for a guided tour business with four participants using Segways. Her business plan identifies Coastal Trail tours as the primary activity of the business. Staff is bringing this issue to Council because motorized vehicles are not permitted on the Coastal Trail except “for temporary access for activities as may be approved by the City.” [FBMC Section 9.68.010(A)]

It should be noted that California Vehicle Code Section 467 defines a “pedestrian” as “a person who is afoot or who is using any of the following...(2) An electric personal assistive mobility device”.

One interpretation of Section 467 is that EPAMDs are actually pedestrians, such that they are not captured by a ban on motorized vehicles.<sup>1</sup>

Additionally, the business license application raises the broader issues of commercial use of the Coastal Trail and, if commercial use is to be allowed, how the City wishes to regulate it.

**RECOMMENDED ACTION:**

Provide direction to staff regarding commercial use of the Coastal Trail and Noyo Headlands Park, including the use of EPAMDs. If the Council wishes to authorize such use, the Council should provide additional direction to staff regarding the scope and nature of the authorized activity.

**ALTERNATIVE ACTION(S):**

No alternatives have been identified. Council direction will determine the desired course of action.

**ANALYSIS:**

Currently, the use of motorized vehicles is prohibited in all parks in Fort Bragg, except for emergency vehicles and motorized strollers and wheelchairs, or if the City issues a permit for temporary access for such use. FBMC Section 9.68.010(A) states:

Motorized vehicles of any kind or nature shall be prohibited from accessing any portion of a park (other than parking lots and/or access roads), except for the following: emergency vehicles; vehicles of the City and its duly authorized representatives or agents; strollers and similar children’s

<sup>1</sup> The City of Healdsburg has addressed this argument in Section 12.16.020(C), the portion of its Municipal Code regulating EPAMDs: “Pedestrian’ shall not, for any purposes, be deemed to include a person who is using an “electric personal assistive mobility device,” as defined in Section [313](#) of the Vehicle Code, as the same may be amended from time to time.”

carriages; wheelchairs; and vehicles whose owners have first obtained a permit from the Director of Public Works for temporary access for activities as may be approved by the City.

Further, FBMC Section 9.68.010(J) states:

Motorized bicycles and scooters are prohibited in all City parks.

While Section 9.68.010(J) does not specifically address EPAMDs, the prohibition of motorized bicycles and scooters is indicative of the Council's intent to prohibit motorized recreational vehicles in City parks.

A local entrepreneur has requested and obtained a business license to operate a business that would like to provide guided tours along the Coastal Trail in Noyo Headlands Park, with tour participants using Segways for transportation. While the business license permits the establishment of the business at an appropriately-zoned location on West Spruce Street, the question remains as to whether or not Segway tours may be conducted on the Coastal Trail. In hindsight, the business license should not have been issued until this policy issue was addressed by the City Council. Nevertheless, pursuant to the FBMC, the business may not operate Segways on the Coastal Trail without a specific permit from the City to allow temporary access. If the use is to be allowed on a long-term basis, it is advisable for the City to modify the Code accordingly. (See **Attachment 1**: FBMC Chapter 9.68 "Preservation of Parks.")

This request gives the Council the opportunity to consider several questions regarding commercial use of the Coastal Trail, including:

- (1) Whether EPAMDs should be permitted on the Coastal Trail;
- (2) Whether the FBMC should be amended to specifically address the use of EPAMDs in City parks and elsewhere in the City; and
- (3) Broader issues regarding commercial use of the Coastal Trail.

#### State Law Allows Local Regulation of EPAMDs

A Segway is considered an "Electric Personal Assistive Mobility Device," or EPAMD, as defined by Section 313 of the California Vehicle Code. Other EPAMDs include hoverboards and Rascals. (See **Attachment 2**: Photos of various EPAMDs.)

The Cal. Vehicle Code permits EPAMDs to operate on sidewalks, bike paths, pathways, trails, bike lanes, streets, roads, or highways, subject to certain restrictions, including:

- The EPAMD cannot be operated at a speed greater than that which is reasonable and prudent given the surroundings;
- The EPAMD cannot be operated at a speed that endangers the safety of persons or property;
- The person operating the EPAMD must yield the right-of-way to all pedestrians on foot.

In addition to the above, Cal. Vehicle Code Section 21282 specifically authorizes a city to regulate the time, place, and manner of EPAMDs, including by limiting or prohibiting entirely their operation in certain areas of the city, or in the entire city. (See **Attachment 3**: Cal. Vehicle. Code sections related to EPAMDs.)

#### Coastal Trail Deed Restriction

The prospect of Segway tours on the Coastal Trail raises the question as to whether or not such use is consistent with the State Coastal Conservancy's restrictions on use of the parkland. One of

the requirements of the \$4.065 million grant from the State that the City used to purchase the parkland was that uses of the property be restricted:

“For the purposes of public access, passive recreation and natural resource, open space and scenic protection, as permitted by the bond act and the terms of the special deposit fund; and no use of the real property inconsistent with these purposes is permitted. As used in the paragraph, ‘passive recreation’ means those recreational activities typically associated with coastal open space that generally are non-structured and require minimal or no developed facilities or improvements to land. Such activities include walking, biking, jogging, hiking, dog walking, bird watching, tide-pooling, beach combing, informal sports activities such as Frisbee or ball throwing and kite-flying, nature viewing, picnicking, and public events that avoid impact to significant cultural and natural resources. Some improvements and ancillary facilities necessary to support visitor access to the coastal open space are permitted in connection with passive recreation uses, including, but not limited to, parking lots interpretive signage, visitor kiosks, trail and stairway improvements, benches and restrooms. Passive recreational activities do not include activities such as: playgrounds, community gardens, ball-fields, and skate parks. The uses enumerated in this paragraph as being included in or excluded from ‘passive recreation’ are by way of example only, and are not an exhaustive list of permitted or unpermitted uses, but may be used to illustrate the types of uses and facilities contemplated as being consistent with ‘passive recreation.’”

Staff asked State Coastal Conservancy Project Manager Joel Gerwein whether Segway tours on the Coastal Trail would be consistent with the deed restriction. He responded:

“I would say that the deed restriction would preclude anything motorized except for wheelchairs. My thinking is that Segway tours would be great if they got people out on the trail who otherwise would not be physically able to get out there. However, it would change the feel of the park to have groups of people zipping around on Segways rather than walking and biking. I am guessing the tours are targeted at people who would rather not walk and who might have fun riding Segways, rather than people who are not physically able. I can check with our legal staff if you would like me to pursue this further.”

Staff requested that the Conservancy’s legal counsel weigh in on the interpretation of the deed restriction. As of the writing of this staff report, we have not heard back. If the Conservancy concludes that Segway tours are not consistent with the deed restriction, the City must abide by its interpretation.

#### *Risk Issues Associated with Segway Use on Coastal Trail*

As with any wheeled vehicle, there is a potential for a Segway accident to occur on the Coastal Trail. The risk may be higher for Segways than bicycles due to the fact that users may be unfamiliar with operation of the vehicle. Furthermore, the Coastal Trail is an 8-foot wide paved path with a 4-foot wide rockered shoulder. Segway use was not contemplated when the trail was designed and there are some locations (particularly the area between the Elm Street parking lot and the Glass Beach stairway) that are very congested in the summer months and during other peak visitor periods.

California law (Cal. Gov. Code Section 831.4) protects public landowners from lawsuits filed by citizens using public roads and trails for recreational purposes. That immunity does not apply if the landowner was paid or given consideration for granting permission to enter the property for recreational purposes. Furthermore, nothing in the law limits the liability of an independent concessionaire, whether or not that person has a contractual relationship with the public entity to use the property, for injuries or damages suffered as a result of operation of a hazardous recreational activity on public property. While conditions could be imposed on the operation of Segway tours to reduce risks, the possibility of an accident and a claim against the City remains. The general manager of the Redwood Empire Municipal Insurance Fund (the City’s pooled insurance) has indicated that the City should require a Segway tour operator to provide

indemnification and to maintain in effect a \$2 million commercial general liability policy with an endorsement adding the City as an “additional insured.”

### Regulation of Segways in Other Communities

Several communities, including Healdsburg, Coronado, and San Francisco have adopted regulations addressing the use of EPAMDs on public paths. Examples of regulations include:

- The City of Healdsburg prohibits the use and operation of EPAMDs on sidewalks, walkways, and pathways located within the downtown business district. The ordinance (Healdsburg Municipal Code Chapter 12.16) notes that “The City Council finds that the use and operation of EPAMDs on all sidewalks, walkways and pathways in the downtown business district jeopardizes public health and safety because such use and operation puts pedestrians at risk of being injured or being forced off public sidewalks, walkways and pathways to avoid injury.” The prohibition does not apply if the EPAMD is being used as part of an activity or event for which a permit allowing such devices has been issued by the City.
- The City of Coronado prohibits the use of EPAMD businesses within the City limits unless a “business operations permit” has been issued for the business (Coronado Municipal Code Chapter 20.42). The Code establishes regulations requiring that customers wear helmets; establishing age limits; prohibiting use, lease or rent of an EPAMD to a customer under the influence of alcohol, drugs or controlled substances. The businesses are also required to provide on-site education and safety training to customers; require tours to travel in single-file process; maintain in effect commercial general liability insurance coverage; etc. The Code also prohibits the use and operation of EPAMDs along Orange Avenue, a beachfront thoroughfare (Chapter 56.90).
- The City of San Francisco has enacted a ban on the use of Segways on bike trails or any other places intended for foot- or bicycle traffic.

### Fort Bragg’s Options

As explained above, the CVC authorizes cities to regulate (or even prohibit) the use of EPAMDs on City paths, sidewalks and streets. The City could thus ban the use of Segways entirely. Or, the City could maintain its current park regulations as found in FBMC Chapter 9.68, which prohibit operation of motorized vehicles (including EPAMDs) in any park, except on a temporary basis and with a specific permit from the City. This approach would allow the City to evaluate each requested use on a case-by-case basis. This approach does not, however, address the overall policy question of commercial use of the Coastal Trail.<sup>2</sup> Moreover, given the (albeit slight) ambiguity in the City’s Municipal Code, and the argument that EPAMDs are pedestrians, if the City wishes to ban EPAMDs entirely, it is advisable that it amend its Code accordingly. The Council could also direct staff to prepare amendments to Chapter 9.68, which could include regulations governing the use of EPAMDs, similar to those enacted in other communities and referenced above. If the Council is interested in pursuing this option, it may want to remand the matter to a Council standing committee or an ad hoc committee to obtain more public input and to work with staff on developing specific recommendations for an ordinance.

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<sup>2</sup> The Department of Justice has determined that EPAMDs may be used as assistive devices for persons with mobility, circulatory, respiratory, or neurological disabilities. If the City wishes to ban Segway, or any EPAMD, use entirely, it should direct staff to ensure any revised Ordinance, or the application of the current Ordinance, appropriately addresses the needs of persons with disabilities.

**FISCAL IMPACT:**

Beyond the expense of staff's time to develop the desired regulations, there is no fiscal impact expected at this time. There could be some revenues generated from business licenses and, if required, special concessionaire permits issued to businesses to operate along the Coastal Trail.

**IMPLEMENTATION/TIMEFRAMES:**

Any follow up actions will be consistent with Council's direction.

**ATTACHMENTS:**

- 1. Fort Bragg Municipal Code Chapter 9.68
- 2. Photographs of EPAMDs
- 3. California Vehicle Code sections pertaining to EPAMDs

**NOTIFICATION:**

- 1. Lynn Baumgartner

**City Clerk's Office Use Only**

|                                                                                                                                                                                                                                                                                                                                                          |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Agency Action <input type="checkbox"/> Approved <input type="checkbox"/> Denied <input type="checkbox"/> Approved as Amended<br>Resolution No.: _____    Ordinance No.: _____<br>Moved by: _____    Seconded by: _____<br>Vote: _____<br><input type="checkbox"/> Deferred/Continued to meeting of: _____<br><input type="checkbox"/> Referred to: _____ |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## CHAPTER 9.68 PRESERVATION OF PARKS

### Section

- [9.68.010](#) Parks – Generally
- [9.68.020](#) Park hours – Generally
- [9.68.030](#) Wiggly Giggly Playground rules
- [9.68.035](#) Exceptions
- [9.68.040](#) Penalty for violation

### **9.68.010 PARKS – GENERALLY.**

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In order to promote and protect public health and welfare and provide for the general safety of the users of City parks, the following rules shall apply:

- A. Motorized vehicles of any kind or nature shall be prohibited from accessing any portion of a park (other than parking lots and/or access roads), except for the following: emergency vehicles; vehicles of the City and its duly authorized representatives or agents; strollers and similar children's carriages; wheelchairs; and vehicles whose owners have first obtained a permit from the Director of Public Works for temporary access for activities as may be approved by the City.
- B. Vehicles shall not stop, stand, park, or be left standing in any of the designated parking lots during park closure hours listed in § [9.68.020](#), except that the City Manager may issue night use permits for parking in connection with organized activities.
- C. Alcoholic beverages or controlled substances, as that term is defined in Cal. Health and Safety Code § [11007](#) (as the same may be amended from time to time), are not allowed within City parks.
- D. Dogs must be kept on leash at all times. The City Council may, by resolution, designate "off leash" areas of any City park. Areas designated by City Council resolution to be "off leash" shall not be subject to this leash requirement.
- E. Dog owners are required to clean up and properly dispose of excrement of their animals.
- F. Overnight camping is not allowed in City parks.
- G. Firearms are not allowed in City parks.
- H. Barbecues and fires are not allowed in City parks except in designated areas.
- I. Bicycles may only be ridden on designated bicycle trails.
- J. Motorized bicycles and scooters are prohibited in all City parks.
- K. Horses are not allowed in City parks.
- L. Littering or disposal of household refuse is not allowed in City parks.
- M. Destruction or removal of any park property is prohibited.

- N. Rollerblades are permitted only on the bicycle and pedestrian trail at Pomo Bluffs Park and Noyo Headlands Park.
- O. Entry into habitat protective areas is prohibited (as designated by habitat protective fencing and/or signage).
- P. Removal of beach glass is prohibited at Noyo Headlands Park.
- Q. The use of ropes and/or other equipment to scale the bluffs is prohibited in Pomo Bluffs Park and Noyo Headlands Park.
- R. Digging and scavenging (use of metal detectors) are prohibited in parks, unless expressly authorized by the Director of Public Works.
- S. Fireworks are not permitted in City parks, unless authorized as part of City-approved pyrotechnic display.
- T. Smoking is prohibited in City parks.

(Ord. 915, passed 07-13-2015)

#### **9.68.020 PARK HOURS – GENERALLY.**

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It shall be unlawful for any person to enter, traverse, or be present in City parks from dusk to dawn the following day, except that the prohibited hours at Bainbridge Park tennis court shall be 10:00 p.m. to dawn the following day. The City Manager may issue night use permits for organized activities. For purposes of this chapter, “dusk” is defined as 1 hour after sunset and “dawn” is defined as 1 hour preceding sunrise.

(Ord. 915, passed 07-13-2015)

#### **9.68.030 WIGGLY GIGGLY PLAYGROUND RULES.**

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- A. No glass containers shall be allowed within the playground area.
- B. No skateboards, scooters (electric, motorized, or “push”), bicycles, rollerblades, roller skates, big wheels, unicycles, tricycles, or other wheeled forms of transportation (other than wheelchairs, strollers, and the like) shall be utilized within the playground boundaries.

(Ord. 915, passed 07-13-2015)

#### **9.68.035 EXCEPTIONS.**

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The provisions of this chapter shall not be applicable to the Skate Park located at the C.V. Starr Community Center, 300 S. Lincoln Street, Fort Bragg, which is separately governed and regulated by the provisions of Chapter [9.69](#).

(Ord. 915, passed 07-13-2015)

#### **9.68.040 PENALTY FOR VIOLATION.**

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Any person violating the provisions of this chapter is guilty of an infraction, and upon conviction thereof shall be punishable as provided in Chapter [1.12](#).

(Ord. 915, passed 07-13-2015)

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**The Fort Bragg Municipal Code is current through Ordinance 923, passed January 25, 2016.**

Disclaimer: The City Clerk's Office has the official version of the Fort Bragg Municipal Code. Users should contact the City Clerk's Office for ordinances passed subsequent to the ordinance cited above.

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Attachment 2: Examples of Electric Personal Assistive Mobility Devices (EPAMDs)



Two person EPAMD



Standing wheelchair



Electric scooter



Electric wheelchair



Self-balancing electric scooter, (aka "Hoverboard" type of device)

## VEHICLE CODE

### SECTION 21280-21282

21280. (a) The Legislature finds and declares all of the following:

(1) This state has severe traffic congestion and air pollution problems, particularly in its cities, and finding ways to reduce these problems is of paramount importance.

(2) Reducing the millions of single passenger automobile trips of five miles or less that Californians take each year will significantly reduce the pollution caused by fuel emissions and aggravated by automobile congestion.

(3) Electric personal assistive mobility devices that meet the definition in Section 313 operate solely on electricity and employ advances in technology to safely integrate the user in pedestrian transportation.

(4) Electric personal assistive mobility devices enable California businesses, public officials, and individuals to travel farther and carry more without the use of traditional vehicles, thereby promoting gains in productivity, minimizing environmental impacts, and facilitating better use of public ways.

(b) The Legislature is adding this article as part of its program to promote the use of no-emission transportation.

21280.5. For purposes of this article, an electric personal assistive mobility device is defined in Section 313.

21281. Every electric personal assistive mobility device, or EPAMD, shall be equipped with the following safety mechanisms:

(a) Front, rear, and side reflectors.

(b) A system that enables the operator to bring the device to a controlled stop.

(c) If the EPAMD is operated between one-half hour after sunset and one-half hour before sunrise, a lamp emitting a white light that, while the EPAMD is in motion, illuminates the area in front of the operator and is visible from a distance of 300 feet in front of the EPAMD.

(d) A sound emitting device that can be activated from time to time by the operator, as appropriate, to alert nearby persons.

21281.5. (a) A person shall not operate an EPAMD on a sidewalk, bike path, pathway, trail, bike lane, street, road, or highway at a speed greater than is reasonable and prudent having due regard for weather, visibility, pedestrians, and other conveyance traffic on, and the surface, width, and condition of, the sidewalk, bike path, pathway, trail, bike lane, street, road, or highway.

(b) A person shall not operate an EPAMD at a speed that endangers the safety of persons or property.

(c) A person shall not operate an EPAMD on a sidewalk, bike path, pathway, trail, bike lane, street, road, or highway with willful or

wanton disregard for the safety of persons or property.

(d) A person operating an EPAMD on a sidewalk, bike path, pathway, trail, bike lane, street, road, or highway shall yield the right-of-way to all pedestrians on foot, including persons with disabilities using assistive devices and service animals that are close enough to constitute a hazard.

21282. Notwithstanding Section 21966, for the purpose of assuring the safety of pedestrians, including seniors, persons with disabilities, and others using sidewalks, bike paths, pathways, trails, bike lanes, streets, roads, and highways, a city, county, or city and county may, by ordinance, regulate the time, place, and manner of the operation of electric personal assistive mobility devices as defined in Section 313, and their use as a pedestrian pursuant to paragraph (2) of subdivision (a) of Section 467, including limiting, prohibiting entirely in the local jurisdiction, or prohibiting use in specified areas as determined to be appropriate by local entities. State agencies may limit or prohibit the time, place, and manner of use on state property.

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# City of Fort Bragg

416 N Franklin Street  
Fort Bragg, CA 95437  
Phone: (707) 961-2823  
Fax: (707) 961-2802

## Text File

File Number: 16-094

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**Agenda Date:** 3/28/2016

**Version:** 1

**Status:** Consent Agenda

**In Control:** City Council

**File Type:** Consent Calendar

**Agenda Number:** 7A.

Authorize City Manager to Execute a Grant of License Permitting the Placement of Steps in the Public Right of Way in front of 144 East Laurel Street

The owners of the building at 144 East Laurel Street have an unusually high doorway threshold. To improve accessibility to the storefront, they have requested permission to construct steps, (up to two steps high), in front of the doorway. As the sidewalk abuts the building, this can be done only in the public right of way. A revocable grant of license would permit these steps over the long term without creating a permanent easement or right. The sidewalk is 10.5 feet wide at this location, the step encroachment will be less than 2.5 feet, and adjacent to the building.

Recording requested by and when recorded  
please return to:

City of Fort Bragg  
416 North Franklin Street  
Fort Bragg, CA 95437  
Attention: June Lemos  
City Clerk

(Space above this line reserved for Recorder's use)

### **Grant of License**

**Landmark Land Company, LLC to Encroach Upon Public Right of Way- 144 East Laurel Street**

**APN No. 008-152-10**

This GRANT OF LICENSE dated \_\_\_\_\_ is made by and between the City of Fort Bragg, a municipal corporation ("City") and Landmark Land Company, LLC ("Landmark").

IN CONSIDERATION OF THE EXPRESS TERMS AND CONDITIONS HEREINAFTER SET FORTH, IT IS AGREED:

**1. Grant**

That City hereby grants to Landmark a revocable license to encroach upon the public right of way for the purpose of constructing private steps and railings at the location and in the manner as set forth below.

**2. Property Affected**

That the encroachment granted herein shall apply to the property known as 144 East Laurel Street as described in the attached Exhibit A. Said encroachment shall be located and in accordance with the attached Exhibit B entitled "PLAT OF BENEFITING PROPERTY AND AREA OF ENCROACHMENT- 144 East Laurel Street".

**3. Costs of Installation**

That all installations made pursuant to this grant shall be without any expense to City.

**4. Performance of Work in Accordance with Minimum Standards**

That the installations constructed within said public right of way shall be in accordance with the minimum requirements of the Department of Public Works of the City and as shown in Exhibit B.

**5. Maintenance**

That Landmark shall maintain said private steps and railings in a state of good repair and in a safe condition, at his own expense and to the satisfaction of City.

**6. Revocation**

That this grant is made subject to all future requirements and more necessary uses of City and be revoked by City upon sixty (60) days notice in writing to remove said private steps and railings.

**7. Grant Conditions Binding on Successors**

That the conditions of this grant, for the property described in Exhibit A, shall be binding upon the successors in interest of Landmark.

**8. Hold Harmless and Indemnification**

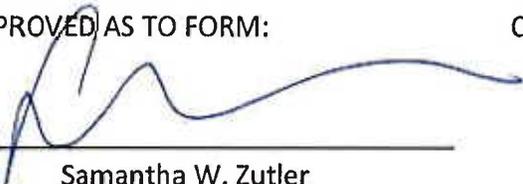
Landmark shall hold City, its officers, boards and commission, and members thereof, its employees and agents harmless of and free from any and all liabilities which might arise out of or relating to this grant of license. Should City or any of its officers, boards and commissions, and members thereof, its employees or agents, be named in any suit, or should any claim be made against it or any of them by suit or otherwise, whether the same may be groundless or not, arising out of or relating to this grant of license, Landmark shall defend City and said officers, boards and commissions, and members thereof, its employees and agents, shall indemnify them for any judgment rendered against them or any sums paid out in settlement or otherwise.

IN WITNESS THEREOF, the parties hereto, by their officers thereunto duly authorized, have executed this agreement as of the date set forth above.

APPROVED AS TO FORM:

CITY OF FORT BRAGG, A Municipal Corporation

By:



Samantha W. Zutler  
City Attorney

By:

\_\_\_\_\_

Linda Ruffing  
City Manager

By:

\_\_\_\_\_

Landmark Land Company, LLC

EXHIBIT A

LEGAL DESCRIPTION OF PROPERTY (PROPERTY OWNED BY LANDMARK LAND COMPANY, LLC)

All that certain real property situate in the City of Fort Bragg, County of Mendocino, State of California described as follows:

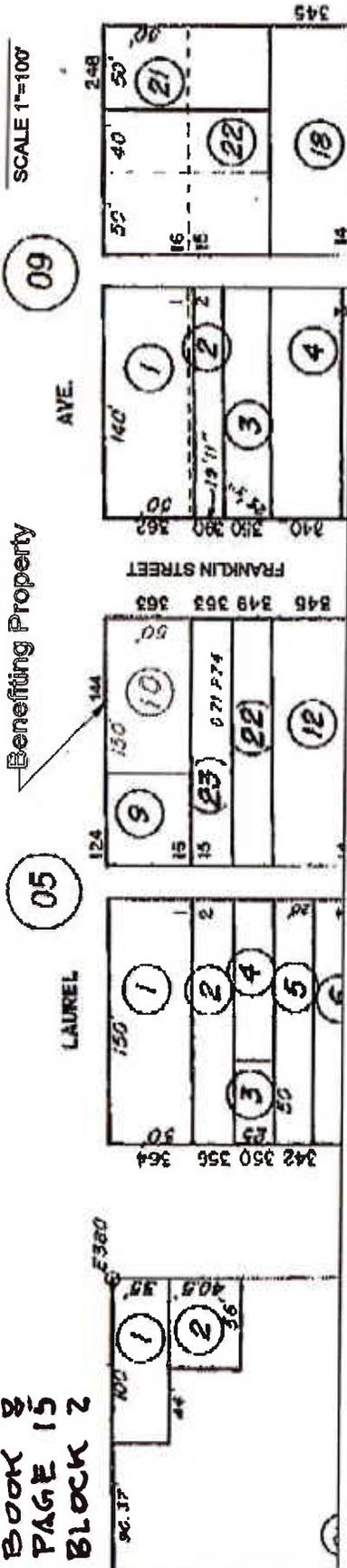
Starting at the corner to Sections 1 and 12, Township 18 North, Range 18 West, and Sections 6 and 7, Township 18 North, Range 17 West, Mount Diablo Base and Meridian, and running hence East 684 feet to the point of beginning; and thence on the exterior boundaries of such parcel of land, East 96 feet; thence South 50 feet; thence West 96 feet; thence North 50 feet to the point of beginning. Being in Lot 16, Block 16 of the City of Fort Bragg.

APN: 008-152-10

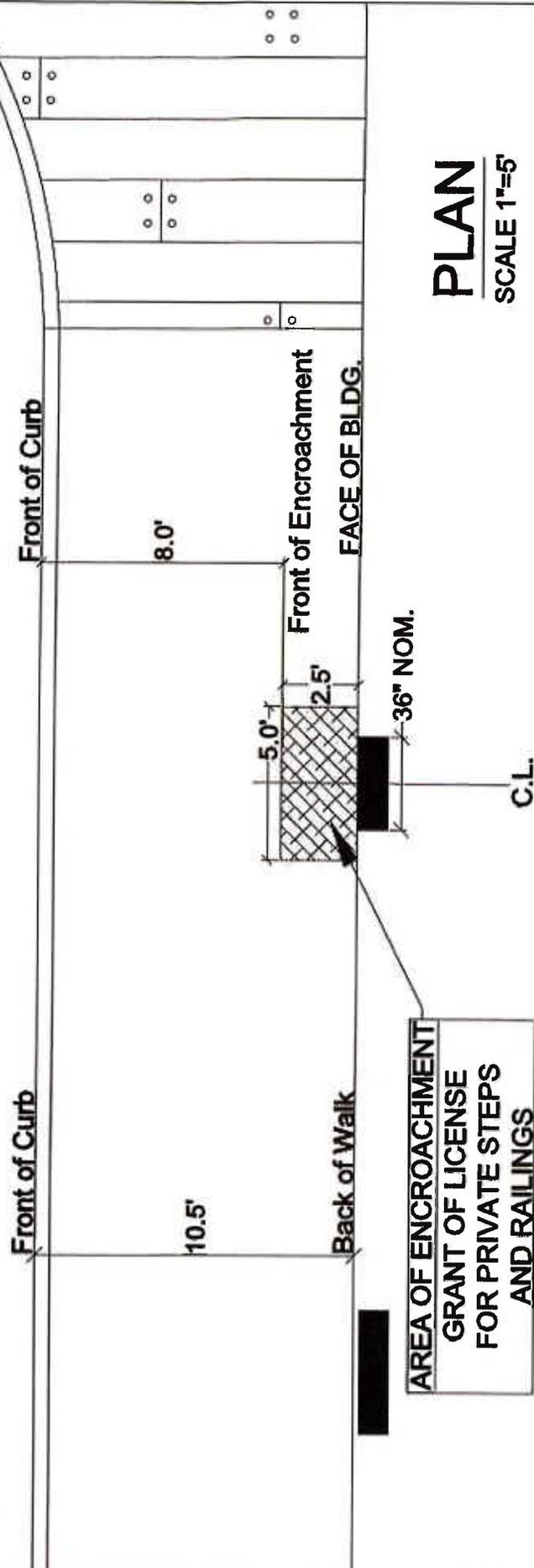
Blks. 16,17,20,21,22 City of Fort Bragg

PLAN  
SCALE 1"=100'

BOOK 8  
PAGE 15  
BLOCK 2



EAST LAUREL STREET



PLAN  
SCALE 1"=5'

EXHIBIT B: PLAT OF BENEFITING PROPERTY AND AREA OF ENCROACHMENT -  
144 EAST LAUREL STREET





# City of Fort Bragg

416 N Franklin Street  
Fort Bragg, CA 95437  
Phone: (707) 961-2823  
Fax: (707) 961-2802

## Text File

File Number: 16-103

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**Agenda Date:** 3/28/2016

**Version:** 1

**Status:** Consent Agenda

**In Control:** City Council

**File Type:** Resolution

**Agenda Number:** 7B.

Adopt Joint City Council/Municipal Improvement District No. 1 Resolution Amending the FY 2015/16 Budget for Mid-Year Budget Adjustments

On March 10, 2016, the City Council/Municipal Improvement District No. 1 (Council/MID) conducted a Mid-Year Budget Review workshop to receive an overview of the status of the current fiscal year expenditures and revenues in all major operating funds and to compare mid-year fiscal performance to budgeted appropriations and revenues. The workshop provided analysis and discussion of revenues received and expenditures to date during the first half of the fiscal year as compared to those projected in the FY 2015/16 Adopted Budget.

As a result of the Mid-Year Budget Review, several budget adjustments were identified as necessary to reallocate appropriations. The attached resolution listing the proposed budget line item adjustments is recommended for approval.

**RESOLUTION NO. \_\_\_\_-2016**  
**RESOLUTION OF THE FORT BRAGG CITY COUNCIL**

and

**RESOLUTION NO. ID \_\_\_\_-2016**

**RESOLUTION OF THE FORT BRAGG MUNICIPAL IMPROVEMENT DISTRICT BOARD  
AMENDING FY 2015/16 BUDGET FOR MID-YEAR BUDGET ADJUSTMENTS**

**WHEREAS**, on June 22, 2015, the Fort Bragg City Council and the Fort Bragg Municipal Improvement District No. 1 District Board adopted the Fiscal Year (FY) 2015/16 Budget; and

**WHEREAS**, on March 10, 2016, the City Council/District Board conducted a Mid-Year Budget Review Workshop; and

**WHEREAS**, as a result of the Mid-Year Budget Review process, it was determined that certain adjustments to the FY 2015/16 Adopted Budget are necessary; and

**WHEREAS**, the adjustments are identified on Exhibit "A" attached hereto; and

**WHEREAS**, there is sufficient revenue and adequate fund balance to fund the allocations; and

**WHEREAS**, based on all the evidence presented, the City Council/District Board finds as follows:

1. Certain mid-year adjustments to the FY 2015/16 Budget are necessary as shown in Exhibit "A".
2. There are sufficient funds to fund the allocations.

**NOW, THEREFORE, BE IT RESOLVED** that the City Council of the City of Fort Bragg/District Board of the Fort Bragg Municipal Improvement District No. 1 does hereby amend the previously adopted FY 2015/16 Budget to incorporate the changes enumerated in Exhibit "A".

**The above and foregoing Resolution was introduced by Council/Board Member \_\_\_\_\_, seconded by Council/Board Member \_\_\_\_\_, and passed and adopted at a regular meeting of the City Council of the City of Fort Bragg/District Board of the Fort Bragg Municipal Improvement District No. 1 held on the 28<sup>th</sup> day of March, 2016, by the following vote:**

**AYES:**  
**NOES:**  
**ABSENT:**  
**ABSTAIN:**

---

**DAVE TURNER,**  
**Mayor/Chair**

**ATTEST:**

---

**June Lemos**  
**City/District Clerk**

**EXHIBIT A**

**FY 2015/16 Requested Mid-Year Budget Adjustments**

| <u>Account Number</u>                                                        | <u>Account Description</u> | <u>Department</u>       | <u>Current Budget</u> | <u>Increase</u> | <u>Adjusted Budget</u> | <u>Justification</u>                                                                                                                            |
|------------------------------------------------------------------------------|----------------------------|-------------------------|-----------------------|-----------------|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| 110-4130-0316                                                                | Pre-employment costs       | Administrative Services | \$ 7,000              | \$ 7,000        | \$ 14,000              | Number of recruitments has exceeded expectations.                                                                                               |
| 110-4130-0366                                                                | Travel/Training            | Administrative Services | 6,050                 | 3,000           | 9,050                  | Additional training needed for new staff.                                                                                                       |
| 110-4130-0381                                                                | Small Tools & Equipment    | Administrative Services | -                     | 3,000           | 3,000                  | Per ergonomics audit, new desks, chairs needed.                                                                                                 |
| 110-4131-0381                                                                | Small Tools & Equipment    | City Clerk              | -                     | 700             | 700                    | Per ergonomics audit, new furnishings needed.                                                                                                   |
| 110-4131-0315                                                                | Elections Costs            | City Clerk              | -                     | 4,000           | 4,000                  | Costs for June 8, 2016 election for Measure U.                                                                                                  |
| 110-4131-0381                                                                | Small Tools & Equipment    | City Clerk              | -                     | 950             | 950                    | New metal shelves needed for archival storage.                                                                                                  |
| 110-4131-0741                                                                | Machinery & Equipment      | City Clerk              | -                     | 6,450           | 6,450                  | 2 Fire proof file cabinets needed to properly and safely store historical documents.                                                            |
| 110-4131-0366                                                                | Travel/Training            | City Clerk              | 2,500                 | 5,500           | 8,000                  | Additional training for the City Clerk. Costs partially offset with scholarships.                                                               |
| 110-4131-0364                                                                | Legal Notices              | City Clerk              | 2,500                 | 1,500           | 4,000                  | Unanticipated expenses associated with legal notices for multiple ordinances.                                                                   |
| 110-4200-0381                                                                | Small Tools and Equipment  | Police Department       | 17,700                | 7,000           | 24,700                 | 8 Officer's radios at \$900 each plus ammunition.                                                                                               |
| 110-4200-0366                                                                | Travel/Training            | Police Department       | 24,000                | 20,000          | 44,000                 | Increased need for POST and other mandated trainings. Costs partially offset by approximately \$6,400 in POST reimbursements.                   |
| 110-4200-0319                                                                | Professional Services      | Police Department       | 335,100               | 1,700           | 336,800                | Additional funds needed for evidence tows.<br><br>Funds for erosion repairs at Noyo Headlands Park. May be offset by grant funds, if available. |
| 110-4392-0375                                                                | General Supplies           | Public Works Parks      | 15,000                | 8,000           | 23,000                 |                                                                                                                                                 |
| <b>General Fund; Total Requested Budget Amendments</b>                       |                            |                         |                       | <b>68,800</b>   |                        |                                                                                                                                                 |
| <u>Account Number</u>                                                        | <u>Account Description</u> | <u>Department</u>       | <u>Current Budget</u> | <u>Increase</u> | <u>Adjusted Budget</u> | <u>Justification</u>                                                                                                                            |
| 520-4393-0353                                                                | Facilities Maint & Repair  | ISF                     | 100,500               | 8,000           | 108,500                | Multiple unplanned expenses: PD A/C system, City Hall carpeting, City Hall East heater, Gym heater, Gym doors and Fort Building carpentry.      |
| <b>Facilities Maint Internal Service Fund; Total Requested Budget Amendm</b> |                            |                         |                       | <b>8,000</b>    |                        |                                                                                                                                                 |
| 522-4550-0352                                                                | Vehicle Repair & Maint     | ISF                     | 33,000                | 3,000           | 36,000                 | New Transmission for PD vehicle. Required to keep vehicle on road.                                                                              |

## EXHIBIT A

### FY 2015/16 Requested Mid-Year Budget Adjustments

| <u>Account Number</u>                                                 | <u>Account Description</u> | <u>Department</u>     | <u>Current Budget</u> | <u>Increase</u>   | <u>Adjusted Budget</u> | <u>Justification</u>                                                                                                                                                                        |
|-----------------------------------------------------------------------|----------------------------|-----------------------|-----------------------|-------------------|------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 522-4550-0741                                                         | Machinery and Equipment    | ISF                   | -                     | 4,000             | 4,000                  | Replace car hoist. Unable to find replacement parts for the current hoist due to its age.                                                                                                   |
| <b>Fleet Internal Service Fund; Total Requested Budget Amendments</b> |                            |                       |                       | <b>7,000</b>      |                        |                                                                                                                                                                                             |
| 615-7999-0799                                                         | Summers Lane Reservoir     | Water Capital Project | -                     | 365,000           | 365,000                | Appropriate funds to complete Summers Lane Reservoir Project. While the CIP identifies costs of \$1.87M, only \$1.5M was appropriated (\$700k grant; \$800k Water Enterprise Capacity Fees) |
| <b>Water Enterprise</b>                                               |                            |                       |                       | <b>365,000</b>    |                        |                                                                                                                                                                                             |
| 710-4712-0319                                                         | Professional Services      | Wastewater Operations | 213,000               | 9,600             | 222,600                | Sludge hauling was inadvertently not budgeted                                                                                                                                               |
| 715-4721-0731                                                         | Sodium Hypo Chlorite - CIP | Wastewater Capital    | -                     | 28,000            | 28,000                 | Additional \$28,000 needed to complete the Sodium Hypochlorite project. Original FY2015 budget was \$85k. New total is \$113k.                                                              |
| <b>Wastewater Enterprise; Total Requested Budget Amendments</b>       |                            |                       |                       | <b>37,600</b>     |                        |                                                                                                                                                                                             |
| 280-4860-0619                                                         | FBFPA Equipment            | Fire Tax Fund         | 88,275                | 23,955            | 112,230                | New truck for the Fire Chief. City's contribution to the purchase is 57% and comes from the Fire Tax Fund (280).                                                                            |
| <b>Fire Equipment Fund; Total Requested Budget Amendments</b>         |                            |                       |                       | <b>23,955</b>     |                        |                                                                                                                                                                                             |
| <b>Grand total</b>                                                    |                            |                       |                       | <b>\$ 510,355</b> |                        |                                                                                                                                                                                             |



# City of Fort Bragg

416 N Franklin Street  
Fort Bragg, CA 95437  
Phone: (707) 961-2823  
Fax: (707) 961-2802

## Text File

File Number: 16-096

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**Agenda Date:** 3/28/2016

**Version:** 1

**Status:** Consent Agenda

**In Control:** City Council

**File Type:** Certificate of  
Completion

**Agenda Number:** 7C.

Accept Certificate of Completion with Granite Construction for the Fort Bragg Coastal Restoration and Trail Project, Project No. 2014-01

On June 27, 2014, City Council awarded a contract to Granite Construction for the Fort Bragg Coastal Restoration and Trail Project, City Project 2014-01. The project involved construction of an approximately 4.5 mile trail system with various public enhancements. These additional improvements include: trails, boardwalks, viewing areas, new parking lots, storm water management facilities, plazas, passive recreation areas, restrooms, interpretive signage, stairs to the beach, and habitat protection. The work has been completed and Director of Public Works Tom Varga signed the Certificate of Completion on March 17, 2016, certifying that all work has been performed to the specifications in the bid documents.

Following acceptance of the Certificate of Completion by the City Council, the City Clerk will file the Notice of Completion with the County Recorder.



## CITY OF FORT BRAGG

*Incorporated August 5, 1889*

416 N. Franklin Street, Fort Bragg, CA 95437

Phone: (707) 961-2823 Fax: (707) 961-2802

[www.FortBragg.com](http://www.FortBragg.com)

### CERTIFICATE OF COMPLETION

All items of work and the provisions of the contract executed with Granite Construction, Inc. for labor, materials, equipment, and supervision for the Fort Bragg Coastal Restoration and Trail Project, City Project 2014-01, dated July 2014 have been completed.

This project as described above was awarded by the Fort Bragg City Council by resolution at their meeting June 23, 2014.

It is recommended that the completed project be accepted by the City Council.

---

Tom Varga, P.E.  
Public Works Director

DATED: March 17, 2016

EXHIBIT "A"



# City of Fort Bragg

416 N Franklin Street  
Fort Bragg, CA 95437  
Phone: (707) 961-2823  
Fax: (707) 961-2802

## Text File

File Number: 16-110

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**Agenda Date:** 3/28/2016

**Version:** 1

**Status:** Consent Agenda

**In Control:** City Council

**File Type:** Minutes

**Agenda Number:** 7D.

Approve Minutes of Special Meeting of March 10, 2016



# City of Fort Bragg

416 N Franklin Street  
Fort Bragg, CA 95437  
Phone: (707) 961-2823  
Fax: (707) 961-2802

## Meeting Minutes Special City Council

*THE FORT BRAGG CITY COUNCIL MEETS CONCURRENTLY  
AS THE FORT BRAGG MUNICIPAL IMPROVEMENT DISTRICT  
NO. 1 AND THE FORT BRAGG REDEVELOPMENT  
SUCCESSOR AGENCY*

---

Thursday, March 10, 2016

3:00 PM

Town Hall, 363 N. Main Street  
AND  
411 Park Street, Fort Bragg

---

### AMENDED Mid-Year Budget Review

#### MEETING CALLED TO ORDER

Mayor Turner called the meeting to order at 3:01 PM.

#### ROLL CALL

Vice Mayor Peters appeared by telephone from 411 Park Street, Fort Bragg.

**Present:** 5 - Vice Mayor Lindy Peters, Councilmember Michael Cimolino, Councilmember Scott Deitz, Councilmember Doug Hammerstrom and Mayor Dave Turner

#### 1. CONDUCT OF BUSINESS

1A. [16-087](#) FY 2015/16 Mid-Year Budget Review- City Council Work Session

1. **Introduction & Overview** - City Manager Ruffing

2. **Review City Council's Goals & Priorities** - City Manager Ruffing

- Goal 1.0: Maintain & Improve City Infrastructure
  - ❖ Summers Lane Reservoir: bid opening, March 31; completion date, early July; anticipate reservoir to be partially full in the fall.
  - ❖ Waste Water Treatment Facility plans: grant funding requests ongoing; CEQA review in progress; plans completion date, early June; construction anticipated in 2017/2018, depending on availability of funding.
  - ❖ Streets & Alleys Repair: Ongoing.
  - ❖ Solid Waste Transfer Station: Ongoing.
- Goal 2.0: Create Walkable & Bike-Friendly Community/Promote Healthy Lifestyles
  - ❖ Coastal Trail: Grand Opening of Coastal Trail set for early June.
  - ❖ Coastal Trail Phase II (Middle Segment): RFP for design services open March 8 to April 29.
  - ❖ Park Maintenance: Ad hoc committee appointed to investigate Transient Occupancy Tax (TOT) increase of 1%; will report to Council before June.
  - ❖ Sidewalks: Public Works Director Varga to conduct sidewalk assessment and work with Caltrans and Mendocino Council of Government (MCOG) staff regarding funding to fix trip and fall hazards.
  - ❖ City of Trails: Conceptual design and feasibility study by WRA Environmental

Consultants completion date, June 30.

- Goal 3.0: Establish Fort Bragg as Leader in Sustainable Practices
  - ❖ Climate Action Plan needs refreshing.
- Goal 4.0: Foster a Strong, Resilient and Prosperous Local Economy
  - ❖ Mill Site Operable Units C&D, action taken this year; Unit E, next year.
  - ❖ Ruffing to explore possible meeting with Georgia-Pacific decision makers regarding disposition of Mill Site property.
  - ❖ Make Preservation of Historic Buildings in Downtown a higher priority.
- Goal 5.0: Improve Community Access to City Services
- Goal 6.0: Develop Partnerships with Various Community Groups and Agencies
  - ❖ Downtown Watch meetings have been productive.
  - ❖ Marijuana legalization report from Public Safety Committee to be brought to Council in May.
- Goal 7.0: Update City's Emergency Plans and Educate Community about Emergency Preparedness

Public Comment: George Reinhardt remarked on the low attendance of community members at this meeting, saying it should be the City's responsibility to make budget meetings fun and inclusive. He spoke about incentivizing water catchment systems, planting bee-friendly plants, the challenges of Housing First, teaching technology in Fort Bragg, and the ineffectiveness of the City's website.

3. **FY 2015/16 Mid-Year Performance Report** - Finance Director Damiani  
Director Damiani introduced Isaac Whippy, new Government Accountant II. Damiani gave the mid-year performance report followed by the FY 2015/16 Mid-Year Budget Review. The bottom line is that at mid-year, there are no red flags and no major issues. **Mayor Turner recessed the meeting at 5:08 PM; the meeting reconvened at 5:28 PM.**

4. **Departmental Progress Reports**

- Community Development Department - Director Jones
  - ❖ Updates on projects completed, started, and in progress.
  - ❖ Mill Site remediation work underway with Department of Toxic Substances Control.
  - ❖ Ordinance regarding home sharing and vacation rentals being drafted.
- Administration - City Manager Ruffing; Administrative Services Director Schneider
  - ❖ Summarized six months of Council action, water emergency, ordinances, litigation, and voter initiative.
  - ❖ Updates on website, social media, downtown Wi-Fi, telephone system.
- Finance - Director Damiani
  - ❖ Fully staffed department; personnel being cross-trained.
  - ❖ Comprehensive Annual Financial Report completed more quickly than last year.
  - ❖ Grant recording and invoicing process being updated.
- Police Department - Chief Lizarraga
  - ❖ Updates on personnel and acquisition of new K-9, Takoda.
  - ❖ New drone purchase for trail monitoring and special events.
  - ❖ Police Department Annual Report in progress.
  - ❖ Working with Downtown Business Watch to research video surveillance cameras for local businesses.

- Public Works/Water/Wastewater - Director Varga, Operations Manager Smith & Project Analyst Prairie
  - ❖ Updates on projects completed, started, and in progress.
  - ❖ Researching desalination plants and other water supply and availability methods.
  - ❖ Working with Rural Community Assistance Corporation to apply for funding for upgrades to the Waste Water Treatment Facility (WWTF).
  - ❖ WWTF upgrade project: HDR, Inc. has completed the 50% plans; environmental documents are being drafted; design is on time and under budget; construction projected for 2018.
- 5. **FY 2015/16 Proposed Mid-Year Budget Adjustments** - City Manager Ruffing  
Ruffing went over the list of Mid-Year Budget Adjustments. Brief discussion was held regarding purchase of equipment and vehicles.
- 6. **FY 2016/17 Budget Planning Issues** - City Manager Ruffing  
Issues are:
  - ❖ Keeping Revenues and Expenditures in balance.
  - ❖ Concern with relatively flat sales tax. Ruffing distributed a chart showing sales tax forecast by fiscal year.
  - ❖ How to increase both sales tax and Transient Occupancy Tax.
  - ❖ Successor Agency activities have wound down and admin fee is declining.
  - ❖ Personnel costs continue to go up.
  - ❖ Health premiums will increase this year; REMIF will advise in April what the increase will be.
  - ❖ Staffing: Addition of a facilities/maintenance worker in Public Works and a Community Services Officer in the Police Department.
  - ❖ Capital Improvement Projects will slow down a bit in 2016/17.
- 7. **Wrap-Up**  
A City Council budget workshop will be held in mid-May.

**This Staff Report was received and filed; direction was given to staff regarding several items that will return for action on future agendas.**

## ADJOURNMENT

**Mayor Turner adjourned the meeting at 7:17 PM.**

---

DAVE TURNER, MAYOR

---

June Lemos, City Clerk

IMAGED (\_\_\_\_\_)



# City of Fort Bragg

416 N Franklin Street  
Fort Bragg, CA 95437  
Phone: (707) 961-2823  
Fax: (707) 961-2802

## Text File

**File Number: 16-105**

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**Agenda Date:** 3/28/2016

**Version:** 1

**Status:** Consent Agenda

**In Control:** City Council

**File Type:** Minutes

**Agenda Number:** 7E.

Approve Minutes of March 14, 2016



# City of Fort Bragg

416 N Franklin Street  
Fort Bragg, CA 95437  
Phone: (707) 961-2823  
Fax: (707) 961-2802

## Meeting Minutes City Council

*THE FORT BRAGG CITY COUNCIL MEETS CONCURRENTLY  
AS THE FORT BRAGG MUNICIPAL IMPROVEMENT DISTRICT  
NO. 1 AND THE FORT BRAGG REDEVELOPMENT  
SUCCESSOR AGENCY*

---

Monday, March 14, 2016

6:00 PM

Town Hall, 363 N. Main Street

---

### MEETING CALLED TO ORDER

Mayor Turner called the meeting to order at 6:00 PM.

### PLEDGE OF ALLEGIANCE

### ROLL CALL

**Present:** 5 - Vice Mayor Lindy Peters, Councilmember Michael Cimolino, Councilmember Scott Deitz, Councilmember Doug Hammerstrom and Mayor Dave Turner

### AGENDA REVIEW

#### 1. MAYOR'S RECOGNITIONS AND ANNOUNCEMENTS

- 1A. [16-081](#)** Proclamation Acknowledging Lynda Bengtsson-Davis, Mateo Ortiz, and Rob Buch for their Work in Completing the Downtown Wi-Fi Project

Mayor Turner asked Scott Deitz to present the Proclamation for the completion of the Downtown Wireless project to Lynda Bengtsson-Davis, Mateo Ortiz, and Rob Buch. Davis, Ortiz, and Buch were called to the podium. Deitz reviewed their various qualifications which made them appropriate for the task and named them as an integral part of the Technology Committee. The technology future for our community is based on the success of this committee. Mendocino Coast Network (MCN) was recognized for their administration of the network free of charge, which made the project possible.

Lynda Bengtsson-Davis thanked Rob, Mateo, and MCN which provided the cloud based service and allowed this project to be possible. Rob spoke about the specific details of the project launch, the limitations intentionally implemented to limit certain bandwidth, and the future for potential range expansion of the network. Mateo expressed his gratitude for working as part of a great team.

#### 2. STAFF COMMENTS

City Manager Ruffing, showed her appreciation for Victor Damiani, Director of Finance, for his excellent work on the budget and corresponding report at the Special City Council Meeting on Thursday, March 10. Ruffing mentioned two upcoming events at Town Hall; Tuesday, March 22, there will be a World Water Day Celebration and Friday, March 25, the City will host City Dialogue. City Dialogue is a round table style discussion forum where City Department representatives will be available to talk about what's going on in the City and answer questions from the public.

### **3. MATTERS FROM COUNCILMEMBERS**

Mayor Turner reported that a tsunami preparedness workshop will be held Wednesday, March 23 from 12-2 PM at the Fort Bragg Police Department as part of Tsunami Awareness Week. There will be a test of the emergency alert system, the tsunami sirens, and aircraft flyover with a loud speaker. Mayor Turner reported on a good turnout at the Downtown Watch meeting and many of the recommendations introduced will be implemented. Mayor Turner noted that the primary feedback from his recent visits with local hospitality facilities was the need for promotion.

Vice Mayor Peters reported on his conversations with the lodging industry and categorized the local hospitality facilities into various categories. Peters compiled information which will be presented to Council, tentatively March 28, to aid in deciding to include an increased Transient Occupancy Tax on the November ballot. Peters announced that Mendocino Transit Authority (MTA) interviewed numerous qualified candidates for the General Manager position and is in the final selection stage.

Councilmember Cimolino shared several citizen encounters which made him reconsider the way in which information is disseminated from meetings, to staff and Councilmembers. 1) Speed bump removal on Cedar and the public intention to raise concerns at a Council Meeting, 2) Water causing issues to the foundations of houses in proximity to green alleys, 3) Citizens who are concerned about their privacy being violated by potential cameras in downtown and drone use on the Coastal Trail, 4) Concern that City Council agenda items are not publicized ahead of time, 5) Is there a summary report about City expenditures which would show if the City is shopping locally, and 6) Lack of participation at the mid-year budget review and the difficulty in hearing what was being said on the conference call. Cimolino expressed the importance of information sharing, as the public expects Council and City staff to be in the know.

Councilmember Deitz encouraged more participation at subcommittee meetings, as this forum allows for more open discussion and public comment at the design phase. Councilmember Deitz reported that the budget was televised and made available on the website for live stream.

Councilmember Doug Hammerstrom reported on a reception at the Mendocino Odd Fellows Hall which benefits Noyo Center for Marine Science and encouraged others to go and see the exhibit.

### **4A. PUBLIC COMMENTS ON NON-AGENDA, CONSENT CALENDAR & CLOSED SESSION ITEMS (30 Minutes)**

- Judy Valadao spoke about the Downtown Watch meeting and the proposed cameras. Valadao expressed concerns about the need for cameras. Valadao asked about the Giving Garden, program skills, and CDBG monitoring.
- Rex Gressett commended Councilmember Cimolino for speaking about information dissemination and his citizen encounters. Gressett gave his opinion about City transparency, self-promotion of bureaucrats, and the City's takeover of the Public, Education and Government (PEG) Access Television network.
- Jay Rosenquist asked for clarification about City Dialogue. Rosenquist stated that there was a date error on the February 22 City Council video. Rosenquist asked for an update on the open position at CV Starr Center. Rosenquist promoted Yes on Measure U and provided additional information for supporting the measure.
- Rosalee Taylor expressed her gratitude to Council and the Mayor. Taylor spoke about encouraging increased attendance at the Council meetings, a broken light fixture at the corner of Bush and West Streets, and keeping the water topic on high alert.

- Evan Dick expressed concerns that the Bike Trail around the City was being reconsidered and spoke in opposition to the City using eminent domain to acquire property for this trail. Dick stated his concerns about the suffering businesses whose agenda is not being served. Dick spoke against the increasing presence of vagrants and he wants a Grand Jury investigation on several City of Fort Bragg employees.
- Richard Nash reported that he has complained to various agencies about his civil rights being violated, by denying access to medical marijuana. Nash promoted marijuana legalization and his Green and Silver Company.

## **5. PUBLIC HEARING**

None.

## **6. CONDUCT OF BUSINESS**

### **6A. [16-091](#) Receive Report Regarding Various Water-Related Topics and Provide Direction to Staff**

Public Works Director Varga presented the staff report and clarified that no action will be required by Council on this item. Varga reviewed rainfall data over the last four months and clarified that despite these increased rainfall totals, this region remains in a moderate drought according to climatologists. The exceptionally wet weather will make this water year above average but it will not be enough to completely undo the impacts of the extended drought conditions. Varga described the impacts of the increased rainfall on existing flows for current City water sources.

Varga reviewed the emergency preparedness strategies. If the 2016 water year presents any interruptions in flows or repeats of last year, the Summers Lane reservoir will meet a portion of the City's water needs. Water conservation measures like HELP H2O which provides financial assistance, public outreach, and information on water saving measures, and the City's work toward streamlining permits for greywater systems are additional methods being used to safeguard the water supply. Director Varga provided a fiscal update from the Stage 3 Water Emergency spending last fall; of the \$50,000 allocated for emergency drought funds \$27,000 was spent and reimbursed as of January 2016. The drilling of test wells is expected to cost \$40,000 and will not be a reimbursable expense from the emergency fund.

Varga reported on the Summers Lane Reservoir implementation schedule and holding capacity, and concluded that it will be completed and partially filled this summer. The goal of the reservoir is to supplement City water, not to replace existing sources. Varga explained that the reservoir will be filled by diverting flows from Waterfall Gulch and the goal is to fill the reservoir to 40% by August 31, a capacity which could supplement City water for approximately four months using 2015 estimates. Councilmember Peters asked if the timeline was realistic. Varga expressed his confidence in task completion, clarifying that the job is not technologically demanding, the necessary permits have been acquired and the remaining work is a dig and fill operation.

Varga identified the two primary goals of the five year Water Enterprise Capital Improvement Projects as the completion of the Summers Lane Reservoir of \$1.5M and the \$1M replacement of an old City water storage tank from 1955 with a glass lined tank. Funding for the replacement tank is anticipated from CDBG block grant and these funds will be available in early 2017.

Varga reported that the City is evaluating other water acquisition options which include groundwater wells which produce at least 200 gallons per minute and desalination technologies. Research needs to be done to determine if groundwater will be injected directly into the system or

whether it will need to go through the treatment plant first. Current drilling and groundwater testing has been postponed due to weather constraints. Desalination projects along the central California coast were reviewed in order to estimate costs and determine feasibility for the City. Varga stated the cost for the City to construct a desalination plant would be approximately \$1-2M with an additional \$50,000/year electricity cost; these estimates do not include other major concerns like environmental mitigation, permitting, regulatory compliance, and the possibility of lawsuits.

Varga presented information about consideration of City acquisition of Pudding Creek reservoir. Varga pointed out that this information was compiled by Community Development Director Jones, and she deserves the credit for the report. Varga reviewed reservoir capacity; historically it held 200 acre-feet (AF) and currently due to sedimentation is holding approximately 34 AF. Georgia Pacific (GP) does not want to keep the reservoir and has considered removing the dam; initial responses show some regulatory support. Varga summarized that using the reservoir does present a number of challenges; 1) Water rights, quality, and storage capacity, 2) dam reliability, and 3) dredging.

- 1) GP's License 6449 for Pudding Creek is a year round diversion of 1 cubic feet per second (cfs) and storage of 200 AF from October to December. GP's water right (S009771) is an uncapped diversion right but is potentially susceptible to a claim of abandonment. GP also holds license 9143 which allows diversion from the Noyo to Pudding Creek at the same point of diversion as the City. This water right authorizes 475 AFY to be used on the mill site for industrial use. The transfer of water rights is simple, however changing the use from industrial to municipal will require a tremendous amount of funding and work by a water attorney. Salt water intrusion is another concern, as the tide rises, saltwater flows under the dam and into the reservoir. The heavy saltwater lays on the bottom which allows fresh water to be collected off the top and this affects the placement location of the freshwater intake.
- 2) Pudding Creek Dam is not registered with Department of Dam Safety since it is less than 6 feet, thus the City would need to hire a structural engineer before making any determination about acquisition.
- 3) The land under the dam is the property of Hawthorne Timber Company and the City would need to acquire it before conducting any work on the reservoir. Historically there have been dramatic decreases in the available capacity of the reservoir, evidenced by the photos in the staff report. Dredging the reservoir would be a way to recover the lost volume. Dredging would require an EIR and a lengthy permitting process with no guarantee of success.

Varga pointed out the cost and time estimate table in the staff report which summarizes total costs for getting the reservoir online are \$12M-\$37M and it will take five years to complete. It is important to compare these costs to the Summers Lane Reservoir which was about \$1M.

Varga reiterated the current water related priorities are completing the groundwater test wells, performing pump tests under demanding conditions, continuing to investigate other potential water sources, getting Summers Lane Reservoir up and running, and securing funds for the new water tank.

Discussion: Councilmembers discussed potential risks and benefits of purchasing the various GP water rights. Staff clarified that the primary problem facing the City water system is one of storage which necessitates the use of a water ponding area. Councilmembers asked about the cost of buying the dam without alterations for use as a water supply, the possible costs associated with relocating the City pipe which currently crosses Pudding Creek Dam, special dispensation uses for

streambeds, effects of dredging on water temperature and endangered species, and potential environmental impacts associated with the dam removal.

Public comment on this agenda item:

- George Reinhardt expressed concerns about the return of salinity issues in the future. Reinhardt recommended staff research solar powered water purification. He spoke against desalination in this community, expressed interest in daylighting the Mill Site creeks, and encouraged increased attendance at committee meetings.
- Eric Clark spoke in opposition of acquiring Pudding Creek for a water source stating that the water quality is in jeopardy evidenced by many years without a good fish spawn.
- Rosalee Taylor expressed her concerns about City water leaks, water quality, and source.
- Judy Valadao refuted Mr. Clark's statement about the absence of fish in Pudding Creek stating fish can be seen in the stream from the Skunk Train.

Discussion:

Mayor Turner expressed his disappointment with the report. Councilmembers had asked that staff provide a cost estimate to just acquire the dam; the extraneous costs could come later. Mayor Turner inquired about the real cost to GP for removal of the City water line and the dam. Mayor Turner clarified the purpose of the Pudding Creek water study was to evaluate potential long term uses like recreation or Mill Site development. Mayor Turner expressed his reluctance to dismiss the acquisition of Pudding Creek Dam and requested that staff perform additional research on the subject.

Vice Mayor Peters expressed his optimism about Summers Lane and local well testing. Peters expressed his concerns about the financial ramification of the Pudding Creek acquisition, clarifying the potential costs of the dam are equivalent to the implementation of two small desalination plants. Peters spoke in favor of desalination as the future of the City's water development needs.

Councilmember Cimolino recommended pursuing acquisition of the Pudding Creek, not dredging, and using reservoir to supplement water storage needs. Cimolino recommended the City increase expectation for well production from 200gpm to 400gpm. Cimolino requested clarification on the processes involved with the replacement of the old water tank. Cimolino expressed his support in the Pudding Creek acquisition with deferred extraneous costs.

Councilmember Deitz requested additional information about the current condition of the dam, asked how time sensitive this decision is, and if dam acquisition could be used as a negotiating tool. Deitz recommended the City evaluate public preference, City's future development goals, and the long term liability of the Pudding Creek acquisition as key factors in decision making. Deitz recommended well drilling as a top priority.

Councilmember Hammerstrom expressed concerns about the ongoing costs associated with dredging Pudding Creek as sedimentation will recur. Hammerstrom recommended the Pudding Creek acquisition report be taken to Public Works and Facilities committee to increase public opportunity for input and emphasized water requirements for Mill Site development as crucial in the decision making process. Hammerstrom expressed his preference towards brackish water treatment instead of desalination.

Additional comments were made with regard to environmental impacts of utilizing Pudding Creek as a water source, disaster preparedness, and timeframes associated with obtaining additional information and securing funds.

City Manager Ruffing summarized Council recommendations as follows:

1. Determine the current condition of Pudding Creek Dam, the minimum requirements to

- make it sustainable, and the cost of ongoing maintenance;
2. Consider the long term community vision;
  3. Evaluate build-out scenarios to determine potential water needs for Mill Site development;
  4. Estimate costs of dam removal and relocation of the City's water line; and
  5. Investigate the probability for draw down on Pudding Creek and use as a stand alone reservoir.

**Council directed staff to address items raised during discussion, bring data to Public Works and Facilities Committee, and then back to City Council.**

#### **4B. PUBLIC COMMENTS ON NON-AGENDA, CONSENT CALENDAR & CLOSED SESSION ITEMS (30 Minutes, If Necessary)**

#### **7. CONSENT CALENDAR**

##### **Approval of the Consent Calendar**

**A motion was made by Vice Mayor Peters, seconded by Councilmember Hammerstrom, to approve the Consent Calendar. The motion carried by the following vote:**

**Aye:** 5 - Vice Mayor Peters, Councilmember Cimolino, Councilmember Deitz, Councilmember Hammerstrom and Mayor Turner

- 7A. [16-073](#)** Adopt Resolution Confirming the Continued Existence of a Local Drought Emergency in the City of Fort Bragg
- This Resolution was adopted on the Consent Calendar.**
- Enactment No: RES 3890-2016
- 7B. [16-079](#)** Accept Certificate of Completion for Green Alley Phase II Project, City Project 2015-03, and Direct City Clerk to File Notice of Completion
- This Certificate of Completion was approved on the Consent Calendar.**
- 7C. [16-085](#)** Receive and File Minutes from the December 9, 2015 Public Safety Committee Meeting
- These Committee Minutes were received and filed on the Consent Calendar.**
- 7D. [16-083](#)** Receive and File Minutes from the January 11, 2016 Special Finance and Administration Committee Meeting
- These Committee Minutes were received and filed on the Consent Calendar.**
- 7E. [16-086](#)** Receive and File Minutes from the January 21, 2016 Public Works and Facilities Committee Meeting
- These Committee Minutes were received and filed on the Consent Calendar.**
- 7F. [16-084](#)** Receive and File Minutes from the January 29, 2016 Special Finance and Administration Committee Meeting
- These Committee Minutes were received and filed on the Consent Calendar.**

7G. [16-080](#) Approve Minutes of February 22, 2016

These Minutes were approved on the Consent Calendar.

**8. CLOSED SESSION**

Mayor Turner recessed the meeting at 8:18 PM; the meeting reconvened to closed session at 8:27 PM.

8A. [16-072](#)

**CONFERENCE WITH LEGAL COUNSEL - ANTICIPATED LITIGATION:**

Significant Exposure to Litigation Pursuant to Paragraph (2) or (3) of Subdivision (d) of California Government Code Section 54956.9:  
Number of potential cases: 1

Mayor Turner reconvened the meeting to open session at 9:31 PM and reported that no reportable action was taken.

**ADJOURNMENT**

Mayor Turner adjourned the meeting at 9:31 PM.

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DAVE TURNER, MAYOR

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Chantell O'Neal, Administrative Assistant

IMAGED (\_\_\_\_\_)