Moving the Needle to Zero Transportation Emissions

Climate Action Summit
Wednesday, May 24, 2023
Presented by: Kate Miller, Executive Director
Introduction

NVTA is a Joint Powers Authority comprised of the Cities, Town, and County of Napa

NVTA is responsible for:

- Administering Measure T –½ cent sales tax for transportation
- Countywide transportation planning
- Administering the Vine Transit System
- Distributing transportation funds
- Coordinating highway improvements with Caltrans
- Administering multi-jurisdictional projects
GHG emissions in the Bay Area

Transportation accounts for 38% of the total Greenhouse Gas (GHG) emissions in the Bay Area.
How and where Napa Valley travels

67% of auto trips in Napa County begin and end in Napa County
How and where Napa Valley travels

Weekday, we travel roughly 1.1 million auto miles inside Napa County and a total of 1.44 million miles!
How and where Napa Valley travels

Opportunities for *Mode Shift*

<table>
<thead>
<tr>
<th>Average Weekday Trip Length Distribution</th>
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<tbody>
<tr>
<td>0-1 miles</td>
<td>12%</td>
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<tr>
<td>1-2 miles</td>
<td>19%</td>
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<tr>
<td>2-5 miles</td>
<td>32%</td>
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<tr>
<td>5-10 miles</td>
<td>15%</td>
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<tr>
<td>10-20 miles</td>
<td>11%</td>
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<tr>
<td>20-30 miles</td>
<td>5%</td>
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<tr>
<td>30-40 miles</td>
<td>2%</td>
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<tr>
<td>40-50 miles</td>
<td>1%</td>
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<tr>
<td>&gt;50 miles</td>
<td>2%</td>
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</table>

63% of the trips we make in Napa Valley are 5 miles or less!
Reducing CO$_2$ emissions through Mode Shift

If we shift just 10% of auto trips to other modes, we eliminate 64.1 tons of CO$_2$ emissions each day.

*Based on 404 grams of CO$_2$ per mile*
Travel Demand Management (TDM)  TDM consists of programs and projects that offer options to driving alone to reduce vehicle miles traveled, reduce emissions, and relieve traffic congestion.

V-Commute is NVTA’s TDM support program  [https://vcommute.org/](https://vcommute.org/)

- Bike Subsidies
- Carpool and Ridesharing Support
- Guaranteed Ride Home

V-Commute promotes transportation alternatives using the Ride Amigos technology platform.
NVTA tools to encourage Mode Shift

Vine Transit

- 11 million passenger trips in 2019
- Routes to BART, Amtrak Capital Corridor/ SF Ferry
- Regional routes that serve the Valley
- Shuttle services that are free or reduced fare
- 4 Fixed Route and Stop to Stop on Demand in the City of Napa
Reducing CO$_2$ emissions by improving and maintaining transportation infrastructure

Smooth roads reduce emissions by reducing friction and complete street improvements provide facilities and improve safety to encourage alternative modes.

NVTA administers Measure T, the ½ cent sales tax for local street road maintenance.
Reducing CO2 emissions by improving and maintaining transportation infrastructure

Roundabouts Improve Safety, Reduce Congestion and Related CO₂ Emissions

• Funding is limited for capacity projects and capacity comes with a very high bar (congestion pricing)

• NVTA has focused more on highway operational improvements – improvements that reduce congestion, increase safety, and improve access to bicycles and pedestrians and do not induce new traffic demand

• Highway improvements that reduce congestion include directional grade separation, roundabouts, parallel traffic circulation enhancements, high occupancy improvements (queue jumps)
Reducing CO$_2$ emissions by improving and maintaining transportation infrastructure

Complete streets and road diets improve safety, encourage modal shift, and reduce CO$_2$ Emissions

Imola Complete Streets – Planned Improvements

SR 29 American Canyon Multi-modal Improvements
NVTA currently has 8 electric buses and $14 million to purchase 14 more buses and charging stations.

The new Vine Bus Maintenance Facility will be equipped with a photovoltaic system for electric bus charging and a Hydrogen-Ready Maintenance Bay.

In 2019 NVTA, provided 1.1 million passenger trips traveling 7.7 million miles – reducing CO₂ by roughly 29,000 tons.

A complete greening of the Vine Fleet will result in eliminating over 1047 tons of CO₂ emissions annually.
What else can we ALL do?

• Trip Chain
• Don’t idle your car
• Ride the bus, walk or ride a bike
• Carpool to school or work
• Ride-Share to work or school
• Avoid driving during peak traffic periods
Thank You!

Kate Miller, Executive Director
Email: kmiller@nvta.ca.gov
Phone: (707) 259-8634