

**ARLINGTON COUNTY** 

# **CARBON NEUTRAL**

TRANSPORTATION MASTER PLAN (CNTMP)

## **5-YEAR ACTION PROGRAM**

**SEPTEMBER 12, 2024** 





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# **Acronyms**

ACCS	Arlington County Commuter Services			
ACEEE	American Council for an Energy Efficient Economy			
AIRE	Arlington Initiative to Rethink Energy			
APS	Arlington Public Schools			
ART	Arlington Regional Transit			
BEB	Battery Electric Bus			
CAO	County Attorney's Office			
CAPE	Communications and Public Engagement			
СВО	Community-Based Organization			
CEP	Community Energy Plan			
СМО	County Manager's Office			
CNG	Compressed Natural Gas			
CNTMP	Carbon Neutral Transportation Master Plan			
CPHD	Community Planning, Housing and Development			
DES	Department of Environmental Services			
DHS	Department of Human Services			
DMF	Department of Management & Finance			
DPR	Department of Parks & Recreation			

DSB	Development Services Bureau
EV	Electric Vehicle
FMB	Facilities Management Bureau
GHG	Greenhouse Gas
GVWR	Gross Vehicle Weight Rating
HRD	Human Resources Department
IAEE	International Association for Energy Economics
ISD	Inspection Services Division
LDV	Light-Duty Vehicle
M/HDV	Medium-/Heavy-Duty Vehicle
MTP	Master Transportation Plan
OSEM	Office of Sustainability and Environmental Management
SOV	Single Occupant Vehicle
SUV	Sport Utility Vehicle
TE&O	Transportation Engineering & Operations
TSP	Transit Strategic Plan
ZEV	Zero-Emission Vehicle



# **Definitions**

Term	Definition
Carbon Neutral or Carbon Neutrality	Net zero carbon dioxide (CO2) emissions. Carbon Neutrality is achieved when anthropogenic CO2 emissions are balanced globally by anthropogenic CO2 removals over a specified period.
County Fleet	For the purposes of this document, "County Fleet" refers to vehicles and equipment operated by APS, ART, and other County entities and departments (unless otherwise specified).
Compressed Natural Gas	Compressed natural gas (CNG) is a fuel gas composed primarily of methane (CH4) compressed to less than 1% of the volume it occupies at standard atmospheric pressure. As a transportation fuel, compressed natural gas relies on spark-ignited internal combustion engines and is typically used in medium- and heavy-duty vehicles. According to the U.S. Department of Energy, natural gas can offer lifecycle greenhouse gas emissions benefits over fossil fuels.
Decarbonization	Decarbonization is framed around decreasing the ratio of carbon dioxide (CO2) or all greenhouse gas emissions related to primary energy production. While full decarbonization means zero unabated (not captured by carbon sequestration or storage) CO2 emissions from energy generation and industrial processes, decarbonization doesn't imply zero-emissions, as emissions can be balanced by carbon sequestration if adequate reductions or enhanced carbon sinks exist. To effectively communicate the scale of change needed, the term must be accompanied by a timeframe and rates of decarbonization.
Electric Vehicle	The U.S. Department of Energy's Energy Information Administration defines an electric vehicle as a vehicle that can be powered by an electric motor that draws electricity from a battery and is capable of being charged from an external source. Electric vehicles include those that can only be powered by an electric motor that draws electricity from a battery (all-electric vehicle or battery electric vehicle) and those that can be powered by an electric motor that draws electricity from a battery and by an internal combustion engine (plug-in hybrid electric vehicle).
Electric Vehicle Charger or Electric Vehicle Charging Station	Manufactured units that safely deliver electricity to charge an electric vehicle battery. A charger may have one or multiple charging connectors (plugs).

# **Definitions** (continued)

Term	Definition
Greenhouse Gas	A greenhouse gas absorbs and re-radiates heat in the lower atmosphere, trapping heat on Earth that would otherwise be radiated to outer space. The main greenhouse gases are carbon dioxide (CO2), methane (CH4), chlorofluorocarbons (CFCs) and nitrous oxide (N20), sulphur hexafluoride (SF6), hydrofluorocarbons (HFC) and perfluorinated carbons (PFC). The most abundant greenhouse gas is carbon dioxide (CO2).
Gross Vehicle Weight Rating	Set by the manufacturer, the gross vehicle weight rating (GVWR) is the he maximum weight that a vehicle can safely carry when fully loaded, including the vehicle's weight, passengers, cargo, fuel, and trailer tongue weight.
Heavy-Duty Vehicle	The U.S. Department of Transportation (DOT) Federal Highway Administration (FHWA) groups vehicles into 8 classes based on their GVWR, which is the maximum weight of the vehicle as specified by the manufacturer. GVWR includes total vehicle weight plus fluids, passengers, and cargo. Heavy-duty vehicles are in Class 7 and 8 with GVWR greater than 26,001 pounds.
Light-Duty Vehicle	The U.S. DOT FHWA groups vehicles into 8 classes based on their GVWR, which is the maximum weight of the vehicle as specified by the manufacturer. GVWR includes total vehicle weight plus fluids, passengers, and cargo. Light-duty vehicles are in Class 1 and 2 and with GVWR less than 10,000 pounds.
Medium-Duty Vehicle	The U.S. DOT FHWA groups vehicles into 8 classes based on their gross GVWR, which is the maximum weight of the vehicle as specified by the manufacturer. GVWR includes total vehicle weight plus fluids, passengers, and cargo. Medium-duty vehicles are in Class 3 through Class 6 with GVWR between 10,001 and 26,000 pounds.
Micromobility	Low-speed electric- or foot-powered transportation devices including bicycles, scooters, and other small, lightweight, wheeled electric-powered conveyances.
Single Occupant Vehicle	A passenger vehicle in which the only occupant is the driver.
Sustainability	Meeting the needs of the present generation without compromising future generations' abilities to meet their own needs.
Zero-Emission Vehicle	Zero-emission vehicles (ZEVs) do not have an internal combustion engine and produce no tailpipe emissions.



# **Background**

- Arlington County has been recognized since the 1970s for its smart growth strategies
- >90% of the County's commercial development is along transportation corridors and within walking distance of public transportation, resulting in:

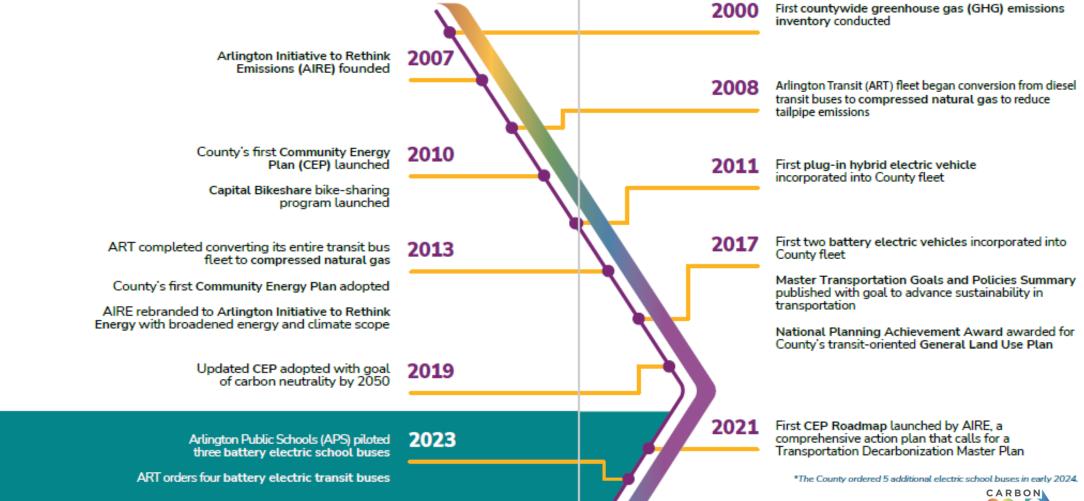
Downward pressure on use of single-occupant vehicles

Increased share of households without vehicles

Increased public transit ridership

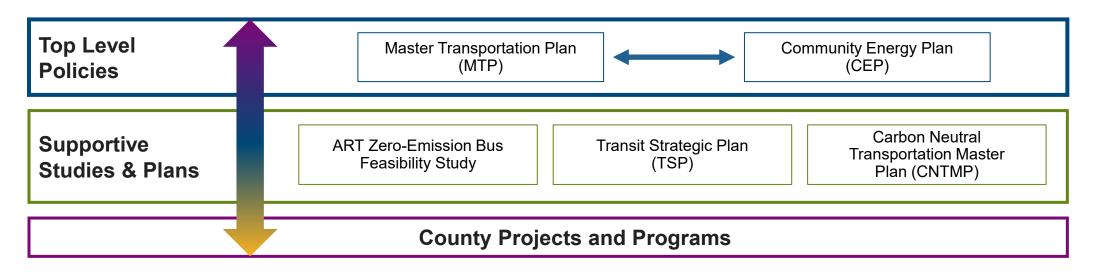
Increased use of walking and micromobility devices

# **Background Clean Transportation in Arlington County through 2023**



# **Background**

- Despite these accomplishments, roughly 32% of the County's GHG emissions originate from transportation
- The Carbon Neutral Transportation Master Plan (CNTMP) focuses on reducing transportation-related emissions of GHGs and other air pollutants
  - Integrated with a suite of County policies, plans, and programs



# **Background**

**County staff and** stakeholders including representatives of APS, ART, and many others worked collaboratively via a series of workshops to develop the **CNTMP** and 5-Year **Action Program** 

Formative workshops to shape the CNTMP's three goals, including:

- 1. Reduce reliance on single occupant vehicles (SOVs).
- 2. Support an array of EV charging options throughout the County.
- 3. Support phased decarbonization of the County fleet.



Technical Research

Strategic

**Planning** 

- Technical memos exploring concepts raised in planning workshops
- Workshops to review preliminary findings from each effort
- Workshops to review and refine results



Objectives & Key Initiatives

**CNTMP** 

 Workshops to generate and refine objectives/key initiatives related to each goal



- •
- Presentations to County Manager and Board members
- Next Steps: 5-Year Action Program to operationalize CNTMP

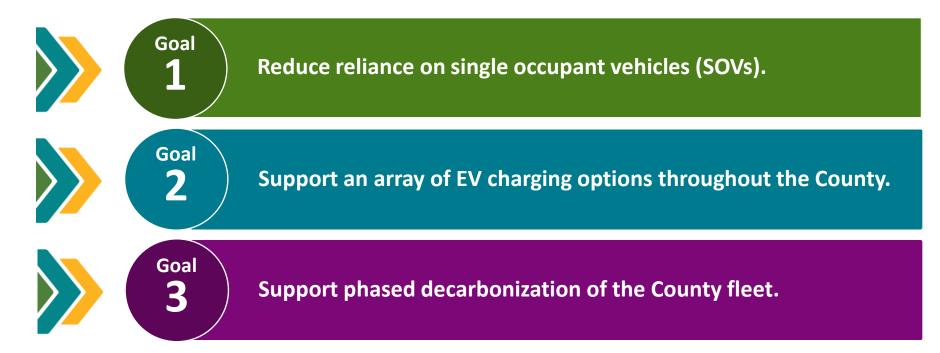


5-Year Action Program  Workshops to generate and refine objectives/key initiatives related to each goal



# 5-Year Action Program Overview

Operationalizes the CNTMP's goals:



• Identifies necessary near-term actions for achieving key initiatives—and consequently, the broader goals and objectives—of the CNTMP.

# 5-Year Action Program Overview

• Each action in the 5-Year Action Program includes a table that outlines 5 key categories of information:

Category	Definition		
Lead	Primary County department or entity responsible for implementing the action (listed alphabetically)		
Support	Entity or entities who will support the Lead in implementing the action (listed alphabetically)		
	Estimated relative cost	t to implement the action:	
Cost to County Government	<b>\$</b> Lower (~\$0 to ~\$75,000)	\$\$ Moderate (~\$75,000 to ~\$150,000)	<b>\$\$\$</b> Higher (More than ~\$150,000)
Potential Impact on	Potential impact on the	e CNTMP goal associated w	rith the action:
CNTMP Goal	Lower	Moderate	Higher
Benefits	Potential benefits associated with the action (see slide 12)		

# 5-Year Action Program Overview

- Each action in the 5-Year Action Program is expected to contribute to GHG emissions reductions
- Each action is also associated with one or more additional categories of benefits:

Indicator	Benefit	Definition
A	Increased adoption or use of clean transportation technologies	Action may result in increased deployment, acquisition, and/or utilization of transportation technologies that reduce or eliminate carbon emissions
C	Opportunity to reduce or offset costs	Action may provide opportunities to lower or eliminate the costs associated with the transition to cleaner transportation options or modes
D	Increased deployment ease or speed	Action may reduce the time and/or challenges associated with the deployment, acquisition, or utilization of clean transportation options or modes
E	Equity and inclusion	Action may support fair availability and/or distribution of clean transportation options or modes and/or support increased access to these modes among disenfranchised populations
G	Economic growth	Action may provide opportunities for economic growth within the County
Р	Partnership opportunity	Action may provide opportunities to foster connection and collaboration—may include public/private partnerships, increased connectivity among residents/ neighbors, and so on
Т	Reduced traffic congestion	Action may reduce the quantity of vehicles on County roadways, helping to alleviate traffic congestion

### Goal 1. Reduce reliance on single occupant vehicles (SOVs).

Objective	Key Initiative	Action		Timeline		
Objective	Key initiative			2026-27	2028-29	
1.1. Enhance multimodal transportation access and connectivity via strategic	1.1.1. Advance transit-oriented	<ul> <li>Design capital projects to increase connectivity between trails and other transportation channels to support multi-modal mobility.</li> </ul>	<del></del>	$\longrightarrow$		
land use planning.	redevelopment.	<ul> <li>Implement one or more capital project(s).</li> </ul>			$\longleftrightarrow$	
1.2. Drive behavior change and market transformation by expanding existing public education programs regarding clean transportation options.	1.2.1. Expand existing public education programs regarding clean transportation options and benefits.	Develop or expand at least three public education campaigns regarding clean transportation options and benefits.	<b>-</b>		<b></b>	
	1.3.1. Develop or promote tools to inform and increase bike and pedestrian activity.	<ul> <li>Establish a pilot program to provide incentives that offset the upfront cost of electric bicycles with at least 60% of funding allocated to low-income applicants.</li> </ul>	$\longleftrightarrow$			
		<ul> <li>Research and summarize smart phone apps that increase bike and pedestrian activity. As relevant, recommend one or more for a pilot.</li> </ul>	$\longleftrightarrow$			
		<ul> <li>Initiate limited pilot(s) of one or more apps and assess suitability for deployment beyond pilot period.</li> </ul>		$\longleftrightarrow$		
1.3. Promote and facilitate increased	1.3.2. Explore opportunities to expand availability of electric car share programs.	<ul> <li>Convene discussions with at least 3 potential electric car share program partners and (as relevant) recommend partnership to pursue as a pilot.</li> </ul>	$\longleftrightarrow$			
utilization of alternative transportation modes.		<ul> <li>Initiate limited pilot(s) of one or more electric car share programs and assess applicability for broader deployment.</li> </ul>		<del></del>	$\longrightarrow$	
		<ul> <li>Inventory opportunities for grants and other funding to support electric car share programs and (as relevant) recommend funding opportunities to pursue.</li> </ul>	$\longleftrightarrow$			
		<ul> <li>Submit one or more funding program application(s).</li> </ul>		<b>←</b>	$\longrightarrow$	
	1.3.3. Pursue grant funding to promote incentive programs that encourage use of	<ul> <li>Inventory opportunities for grants and other funding to support incentive programs and (as relevant) recommend funding opportunities to pursue.</li> </ul>	$\longleftrightarrow$			
	public transportation and multimodal transportation options.	Submit one or more funding program application(s).		<del></del>	<b>→</b>	

### Goal 2. Support an array of EV charging options throughout the County.

Objective	Key Initiative	Action	Timeline		
		Action		2026-27	2028-29
	2.1.1. Explore right-of-way charging options and technologies.	<ul> <li>Examine and summarize best practices in ROW charging and (as relevant) recommend one or more options to pilot in the County.</li> </ul>	$\longleftrightarrow$		
2.1. Expand custom EV charging solutions for		o Initiate limited pilot(s) of one or more approaches and assess applicability for broader deployment.		$\longleftrightarrow$	
at-home and neighborhood charging.	2.1.2. Explore the potential for	Conduct targeted outreach within neighborhoods that include multi-unit dwellings to engage participants in one or more neighborhood EV charging cooperative pilot(s).	$\longleftrightarrow$		
	neighborhood EV charging cooperatives.	<ul> <li>Assess best practices in neighborhood EV charging cooperatives and (as relevant) recommend one or more options to pilot in the County.</li> </ul>		$\longleftrightarrow$	
	2.2.1. Build upon existing deployments of public EV chargers on County property.	Continue deploying public EV chargers at seven or more County-owned sites.	<del></del>		$\longrightarrow$
	2.2.2. Operationalize existing analyses regarding public EV chargers on private-	<ul> <li>Via targeted outreach, recruit at least 6 houses of worship, nonprofit organizations, and/or businesses to develop public-private partnerships with the County to deploy public chargers at their properties.</li> </ul>	<b>←</b>	$\longrightarrow$	
2.2. Promote public EV	sector sites, including sites in underserved communities.	Implement one or more partnership approaches and assess applicability for broader deployment.			$\longleftrightarrow$
charging.	2.2.3. Continuously track and pilot emerging public EV charging technologies.	<ul> <li>Research and summarize emerging technologies including technologies to support lower-cost charger deployments at parking structures (to support businesses and multi-unit dwellings). As relevant, recommend one or more pilot approaches.</li> </ul>	<b>←</b>	<b>→</b>	
		<ul> <li>Initiate limited pilot(s) of one or more technologies and assess applicability for broader deployment.</li> </ul>			$\longleftrightarrow$
	2.3.1. Apply design, accessibility, and safety standards for residential and commercial EV chargers.	Benchmark Arlington County's standards against best practices.	$\longleftrightarrow$		
		<ul> <li>Develop proposal(s) for new or revised standards for Arlington County.</li> </ul>		$\longleftrightarrow$	
		Recommend proposed standards to the County Board.		•	$\longleftrightarrow$
2.3. Support clear processes for EV charger deployments at residences and businesses.	2.3.2. Consider streamlined and/or discounted permitting processes for EV chargers.	Benchmark Arlington County's existing EV charger permitting processes against best practices in other communities.	$\longleftrightarrow$		
		Develop proposal(s) for new or revised processes.		$\longleftrightarrow$	
		<ul> <li>Recommend proposed (new or revised) process to the DES-DSB.</li> </ul>			$\longleftrightarrow$
	2.3.3. Coordinate with Dominion Energy	Engage Dominion Energy representatives to review existing utility processes.	$\longleftrightarrow$		
	to streamline utility processes for EV charger deployments.	<ul> <li>Prepare and deliver proposal for streamlined processes to Dominion Energy.</li> </ul>		$\longleftrightarrow$	

### Goal 3: Support phased decarbonization of the County fleet

Objective Key Initiative		Action		Timeline		
Objective	Key minative	Action	2024-25	2026-27	2028-29	
3.1. Right-size the County	3.1.1. Continue post-COVID review of the quantity of vehicles in the County fleet.	Identify opportunities for reducing fleet vehicle assignments.	<del></del>		$\longrightarrow$	
fleet.	3.1.2. Continue review of vehicle size requirements to ensure acquisition of the smallest County fleet vehicle to meet user needs.	Identify opportunities to diversify fleet vehicle typesi.e., offsetting vehicle use with bicycles and/or other micromobility devices.	<b>—</b>		<b>→</b>	
		For passenger cars, achieve 60% ZEVs by 2025.	$\leftarrow$	$\longrightarrow$		
	3.2.1. Establish the following targets for	o For passenger cars, continue toward target of 100% ZEVs by 2032.		,	$\longleftrightarrow$	
	non-public safety County and ART fleet vehicles subject to market availability:	• For light-duty trucks/SUVs, continue toward target of 50% ZEVs by 2030 and 100% ZEVs by 2037.	$\leftarrow$		$\longrightarrow$	
	For passenger cars, 60% ZEVs by 2025 and 100% ZEVs by 2032.     For light-duty trucks/SUVs, 50% ZEVs	<ul> <li>For M/HDV, assess available technologies for the County fleet including costs, availability, and early deployment outcomes. As relevant, recommend one or more vehicle types for pilots.</li> </ul>	<b>←</b>	$\longrightarrow$		
3.2. Transition the County fleet to zero-emission	by 2030 and 100% ZEVs by 2037.  • For medium- and heavy-duty vehicles	o Pilot one or more M/HDV technologies in the County fleet.		1	$\longleftrightarrow$	
vehicles (ZEVs).	(M/HDV) and equipment, continue reviewing technology feasibility and market availability.	<ul> <li>For M/HDV, pilot battery electric buses (BEB) in the ART bus fleet and develop an evaluation plan with performance metrics</li> </ul>	$\longleftrightarrow$			
		o Continue the pilot program and implement an evaluation of the program		$\longleftrightarrow$		
		o Publish an evaluation of the BEB pilot program			$\longleftrightarrow$	
	3.2.2. Explore grants and other incentives to support EV acquisition for the County government fleet and APS fleet.	<ul> <li>Inventory opportunities for grants and other funding to support fleet EV deployments and (as relevant) recommend funding opportunities to pursue.</li> </ul>	$\longleftrightarrow$			
		<ul> <li>Submit one or more funding program application(s).</li> </ul>		$\longleftrightarrow$		
	3.3.1. Continue ongoing efforts to deploy charging infrastructure to support the County EV fleet.	Research and summarize emerging technologies including technologies to support lower-cost charger deployments at parking structures. As relevant, recommend one or more pilot approaches.	<del></del>	<b></b>		
		<ul> <li>Initiate limited pilot(s) of one or more emerging fleet charging technologies and assess applicability for broader deployment.</li> </ul>			$\longleftrightarrow$	
3.3. Strategically deploy charging infrastructure to	3.3.2. Explore grants/incentives to support deployment of County fleet vehicle	<ul> <li>Inventory opportunities for grants and other funding to support fleet EV charging infrastructure deployments and (as relevant) recommend funding opportunities to pursue.</li> </ul>	<del>-</del>	<b></b>		
support electric fleet vehicles.	charging infrastructure.	Submit one or more funding program application(s).			$\longleftrightarrow$	
	3.3.3. Explore possible mechanisms to	Design and implement pilot program with Police Department to support at-home charging for electric law enforcement vehicles.	$\longleftrightarrow$			
	support cost-efficient at-home charging for County staff with take-home vehicles.	Continue the pilot and begin evaluating the program.		$\longleftrightarrow$		
		Complete evaluation of the pilot program.			$\longleftrightarrow$	

# Goal 1. Reduce reliance on single occupant vehicles (SOVs).

### Goal 1. Reduce reliance on single occupant vehicles (SOVs).

Objective	Key Initiative	Action		Timeline		
Objective	Key initiative			2026-27	2028-29	
1.1. Enhance multimodal transportation access and connectivity via strategic	1.1.1. Advance transit-oriented	<ul> <li>Design capital projects to increase connectivity between trails and other transportation channels to support multi-modal mobility.</li> </ul>	<del></del>	$\longrightarrow$		
land use planning.	redevelopment.	<ul> <li>Implement one or more capital project(s).</li> </ul>			$\longleftrightarrow$	
1.2. Drive behavior change and market transformation by expanding existing public education programs regarding clean transportation options.	1.2.1. Expand existing public education programs regarding clean transportation options and benefits.	Develop or expand at least three public education campaigns regarding clean transportation options and benefits.	<b>-</b>		<b></b>	
	1.3.1. Develop or promote tools to inform and increase bike and pedestrian activity.	<ul> <li>Establish a pilot program to provide incentives that offset the upfront cost of electric bicycles with at least 60% of funding allocated to low-income applicants.</li> </ul>	$\longleftrightarrow$			
		<ul> <li>Research and summarize smart phone apps that increase bike and pedestrian activity. As relevant, recommend one or more for a pilot.</li> </ul>	$\longleftrightarrow$			
		<ul> <li>Initiate limited pilot(s) of one or more apps and assess suitability for deployment beyond pilot period.</li> </ul>		$\longleftrightarrow$		
1.3. Promote and facilitate increased	1.3.2. Explore opportunities to expand availability of electric car share programs.	<ul> <li>Convene discussions with at least 3 potential electric car share program partners and (as relevant) recommend partnership to pursue as a pilot.</li> </ul>	$\longleftrightarrow$			
utilization of alternative transportation modes.		<ul> <li>Initiate limited pilot(s) of one or more electric car share programs and assess applicability for broader deployment.</li> </ul>		<del></del>	$\longrightarrow$	
		<ul> <li>Inventory opportunities for grants and other funding to support electric car share programs and (as relevant) recommend funding opportunities to pursue.</li> </ul>	$\longleftrightarrow$			
		<ul> <li>Submit one or more funding program application(s).</li> </ul>		<b>←</b>	$\longrightarrow$	
	1.3.3. Pursue grant funding to promote incentive programs that encourage use of	<ul> <li>Inventory opportunities for grants and other funding to support incentive programs and (as relevant) recommend funding opportunities to pursue.</li> </ul>	$\longleftrightarrow$			
	public transportation and multimodal transportation options.	Submit one or more funding program application(s).		<del></del>	<b>→</b>	

Goal

Reduce reliance on single occupant vehicles (SOVs).

### Objective 1.1. Enhance multimodal transportation access and connectivity via strategic land use planning.

Key Initiative 1.1.1. Advance transit-oriented redevelopment.

	2024-25	2026-27	2028-29
Action	Design capital projects to increase connectivity between trails and other transportation channels to support multimodal mobility.  Implement one more capital project(s).		
Lead	DES-Transportation	Division	
Support	CPHD, DES-Engineering Bureau, DES-OSEM, DPR		
Cost to County Government	\$\$\$		
Impact on CNTMP Goal 1		***	

Benefits	
G	Increased connectivity and access could increase commerce for local businesses.
Р	Large-scale projects may present opportunities for public-private partnerships or other types of partnerships and collaboration.
Т	Projects supporting multi-modal mobility may shift travelers out of passenger vehicles to alternative modes, reducing traffic congestion.
E	Projects that connect underserved communities to countywide resources and destinations may promote economic activity in underserved communities

Goal 1

Reduce reliance on single occupant vehicles (SOVs).

Objective 1.2. Drive behavior change and market transformation by expanding existing public education programs regarding clean transportation options.

Key Initiative 1.2.1. Expand existing public education programs regarding clean transportation options and benefits.

	2024-25	2026-27	2028-29
Action	Develop or expand at least three public education campaigns regarding clean transportation options and benefits.		
Lead	DES-Transportation Division		
Support	ACCS, CAPE, DES-Communications, DES-OSEM, DHS-Public Health		
Cost to County Government	<b>\$ - \$\$</b> (depends on program scope/scale)		
Impact on CNTMP Goal 1		*	

Benefits	
A	Better understanding of clean transportation options and benefits may contribute to increased adoption or use of these technologies.
T	Increased adoption or use of clean transportation technologies (such as micro-mobility devices) may alleviate traffic congestion.

Goal

Reduce reliance on single occupant vehicles (SOVs).

### Objective 1.3. Promote and facilitate increased utilization of alternative transportation modes.

Key Initiative 1.3.1. Develop or promote tools to inform and increase bike and pedestrian activity.

Note: Key Initiative 1.3.1. has two sets of associated actions – this slide presents the first.

	2024-25	2026-27	2028-29
Action	Establish a pilot program to provide incentives that offset the upfront cost of electric bicycles with at least 60% of funding allocated to lowincome applicants.		
Lead	DES-OSEM		
Support	ACCS, DPR, Non-Profit Organizations (e.g., BikeArlington, EcoAction Arlington)		
Cost to County Government	\$\$ - \$\$\$ (depends on pilot scope/scale)		
Impact on CNTMP Goal 1	* = **		

Benefits	
Т	Increased utilization of alternative transportation modes may alleviate traffic congestion.
A	Promotion and facilitation of increased use of alternative modes could increase adoption of clean transportation technologies
D	Piloting a program of this nature may help streamline later full-scale deployments based on lessons learned.

Goal 1

Reduce reliance on single occupant vehicles (SOVs).

### Objective 1.3. Promote and facilitate increased utilization of alternative transportation modes.

Key Initiative 1.3.1. Develop or promote tools to inform and increase bike and pedestrian activity.

**Note:** Key Initiative 1.3.1. has two sets of associated actions – this slide presents the second.

	2024-25	2026-27	2028-29
Action	Research and summarize smart phone apps that increase bike and pedestrian activity. As relevant, recommend one or more for a pilot.	Initiate limited pilot(s) of one or more apps and assess suitability for deployment beyond pilot period.	
Lead	DES-OSEM		
Support	ACCS, DPR, Non-Profit Organizations (e.g., BikeArlington, EcoAction Arlington)		
Cost to County Government	<b>\$\$ - \$\$\$</b> (depends on pilot scope/scale)		
Impact on CNTMP Goal 1	* = **		

Benefits	
A	Use of tools to inform and increase bike and pedestrian activity could contribute to increased adoption or use of bicycling and/or walking
Т	Increased adoption or use of bicycling and/or walking may alleviate traffic congestion.
D	Piloting apps of this nature may help streamline later full-scale deployments based on lessons learned.

Goal

Reduce reliance on single occupant vehicles (SOVs).

### Objective 1.3. Promote and facilitate increased utilization of alternative transportation modes.

Key Initiative 1.3.2. Explore opportunities to expand availability of electric car share programs.

Note: Key Initiative 1.3.2. has two sets of associated actions – this slide presents the first.

	2024-25	2026-27	2028-29
Action	Convene discussions with at least 3 potential electric car share program partners and (as relevant) recommend partnership to pursue as a pilot.	Initiate limited pilot(s) of one or more electric car share programs and assess applicability for broader deployment.	
Lead	DES-OSEM		
Support	CBOs, DES-Facilities, DHS, DMF		
Cost to County Government	\$\$ - \$\$\$ (depends on pilot scope/scale)		
Impact on CNTMP Goal 1	* _ **		

Benefits	
Р	Electric car share programs may present opportunities for public-private partnerships.
Т	Increased use of electric car share programs could offset use of single-occupant vehicles and alleviate traffic congestion.
D	Piloting an electric car share program may help streamline later full-scale deployments based on lessons learned.
E	Car share programs may expand access individuals who do not have access to personal vehicles or cannot afford them.

Goal 1

Reduce reliance on single occupant vehicles (SOVs).

### Objective 1.3. Promote and facilitate increased utilization of alternative transportation modes.

Key Initiative 1.3.2. Explore opportunities to expand availability of electric care share programs.

**Note:** Key Initiative 1.3.2. has two sets of associated actions – this slide presents the second.

	2024-25	2026-27	2028-29
Action	Inventory opportunities for grants and other funding to support electric car share programs and (as relevant) recommend funding opportunities to pursue.	Submit one or more funding program application(s).	
Lead	DES-OSEM		
Support	CBOs, DES-Facilities, DHS, DMF		
Cost to County Government	\$\$		
Impact on CNTMP Goal 1		**	

Benefits	
С	Grants may present opportunities to offset the costs of expanding electric car share programs.
Р	Electric car share programs may present opportunities for public-private partnerships.
Т	Increased use of electric car share programs could offset use of single-occupant vehicles and alleviate traffic congestion.
E	Car share programs may expand access individuals who cannot afford their own vehicles.

Goal

Reduce reliance on single occupant vehicles (SOVs).

### Objective 1.3. Promote and facilitate increased utilization of alternative transportation modes.

Key Initiative 1.3.3. Pursue grant funding to promote incentive programs that encourage use of public transportation and multimodal transportation options.

	2024-25	2026-27	2028-29
Action	Inventory opportunities for grants and other funding to support incentive programs and (as relevant) recommend funding opportunities to pursue.	Submit one or more funding program application(s).	
Lead	DES-Transportation		
Support	DES-OSEM, DES-Finance		
Cost to County Government	\$		
Impact on CNTMP Goal 1	*		

Benefits	
С	Grants may present opportunities to offset the costs of incentive programs.
A	Incentive programs may increase adoption of clean transportation technologies.
Т	Increased use of public transportation and multimodal transportation options could alleviate traffic congestion.
Ε	Incentive programs may provide financial support residents with lower incomes.

Goal 2.

Support an array of EV charging options throughout the County.

### Goal 2. Support an array of EV charging options throughout the County.

Objective	Key Initiative	Action		Timeline		
Objective	Rey milative			2026-27	2028-29	
	2.1.1. Explore right-of-way charging	<ul> <li>Examine and summarize best practices in ROW charging and (as relevant) recommend one or more options to pilot in the County.</li> </ul>	$\longleftrightarrow$			
2.1. Expand custom EV charging solutions for	options and technologies.	o Initiate limited pilot(s) of one or more approaches and assess applicability for broader deployment.		$\longleftrightarrow$		
at-home and neighborhood charging.	2.1.2. Explore the potential for	Conduct targeted outreach within neighborhoods that include multi-unit dwellings to engage participants in one or more neighborhood EV charging cooperative pilot(s).	$\longleftrightarrow$			
	neighborhood EV charging cooperatives.	<ul> <li>Assess best practices in neighborhood EV charging cooperatives and (as relevant) recommend one or more options to pilot in the County.</li> </ul>		$\longleftrightarrow$		
	2.2.1. Build upon existing deployments of public EV chargers on County property.	Continue deploying public EV chargers at seven or more County-owned sites.	<del></del>		$\longrightarrow$	
	2.2.2. Operationalize existing analyses regarding public EV chargers on private-	<ul> <li>Via targeted outreach, recruit at least 6 houses of worship, nonprofit organizations, and/or businesses to develop public-private partnerships with the County to deploy public chargers at their properties.</li> </ul>	<b>←</b>	$\longrightarrow$		
2.2. Promote public EV	sector sites, including sites in underserved communities.	Implement one or more partnership approaches and assess applicability for broader deployment.			$\longleftrightarrow$	
charging.	2.2.3. Continuously track and pilot emerging public EV charging technologies.	<ul> <li>Research and summarize emerging technologies including technologies to support lower-cost charger deployments at parking structures (to support businesses and multi-unit dwellings). As relevant, recommend one or more pilot approaches.</li> </ul>	<b>←</b>	<b>→</b>		
		<ul> <li>Initiate limited pilot(s) of one or more technologies and assess applicability for broader deployment.</li> </ul>			$\longleftrightarrow$	
	2.3.1. Apply design, accessibility, and safety standards for residential and commercial EV chargers.	Benchmark Arlington County's standards against best practices.	$\longleftrightarrow$			
		<ul> <li>Develop proposal(s) for new or revised standards for Arlington County.</li> </ul>		$\longleftrightarrow$		
2.3. Support clear processes for EV charger deployments at residences and businesses.		Recommend proposed standards to the County Board.		•	$\longleftrightarrow$	
	2.3.2. Consider streamlined and/or discounted permitting processes for EV chargers.	Benchmark Arlington County's existing EV charger permitting processes against best practices in other communities.	$\longleftrightarrow$			
		Develop proposal(s) for new or revised processes.		$\longleftrightarrow$		
		<ul> <li>Recommend proposed (new or revised) process to the DES-DSB.</li> </ul>			$\longleftrightarrow$	
	2.3.3. Coordinate with Dominion Energy	Engage Dominion Energy representatives to review existing utility processes.	$\longleftrightarrow$			
	to streamline utility processes for EV charger deployments.	<ul> <li>Prepare and deliver proposal for streamlined processes to Dominion Energy.</li> </ul>		$\longleftrightarrow$		

Goal 2

Support an array of EV charging options throughout the County.

### Objective 2.1. Expand custom EV charging solutions for at-home and neighborhood charging.

Key Initiative 2.1.1. Explore right-of-way charging options and technologies.

	2024-25	2026-27	2028-29
Action	Examine and summarize best practices in ROW charging and (as relevant) recommend one or more options to pilot in the County.  Initiate limited pilot(s) of one or more approaches and assess applicability for broader deployment.		
Lead	AIRE		
Support	DES-DSB, DES-TE&O		
Cost to County Government	\$\$ - \$\$\$ (depends on pilot scope/scale)		
Impact on CNTMP Goal 2	* _ **		

Benefits	
A	Access to EV charging in the right-of-way could alleviate consumer concerns regarding where to charge and increase EV adoption
Р	Right-of-way charging may provide opportunities for public-private partnerships.
D	Piloting approaches of this nature may help streamline later full-scale deployments based on lessons learned.
E	Right-of-way charging may enable residents who do not have access to off-street parking to access at-home (or "near-home") charging.

Goal 2

Support an array of EV charging options throughout the County.

### Objective 2.1. Expand custom EV charging solutions for at-home and neighborhood charging.

Key Initiative 2.1.2. Explore the potential for neighborhood EV charging cooperatives.

	2024-25	2026-27	2028-29
Action	Conduct targeted outreach within neighborhoods that include multi-unit dwellings to engage participants in one or more neighborhood EV charging participants in one or more neighborhood EV charging cooperative pilot(s).  Assess best practices in neighborhood EV charging cooperatives and (as relevant) recommend one or more options to pilot in the County.		
Lead	CPHD, DES-OSEM, DES-Transportation		
Support	Building Owners/Homeowners, Chamber of Commerce, Civic Associations, Dominion Energy Virginia		
Cost to County Government	<b>\$ - \$\$\$</b> (depends on pilot scope/scale)		
Impact on CNTMP Goal 2	* _ **		

Benefits	
Р	Neighborhood EV charging cooperatives may provide opportunities for collaboration and partnership among neighbors. Cooperatives may also provide opportunities for public-private partnerships.
A	Providing access to EV charging at these locations may encourage EV adoption nearby.
D	Piloting one or more cooperative charging programs may help streamline later full-scale deployments based on lessons learned.
E	Neighborhood cooperatives may enable residents who do not have access to off-street parking or who cannot afford their own EV chargers to access at-home (or "near-home") charging.

Goal 2

Support an array of EV charging options throughout the County.

### Objective 2.2. Promote public charging.

Key Initiative 2.2.1. Build upon existing deployments of public EV chargers on County property.

	2024-25	2026-27	2028-29
Action	Continue deploying public County-owned sites.	EV chargers at seven or m	nore
Lead	FMB		
Support	DES-OSEM		
Cost to County Government	\$\$ -	\$\$\$	
Impact on CNTMP Goal 2	**	<b>:*</b>	

Benefits	
G	Public chargers on County properties could draw new patrons to County facilities and services.
A	Providing access to EV charging at these locations may encourage EV adoption nearby.
E	Public chargers may support residents who do not have access to off-street parking and/or at-home charging



Support an array of EV charging options throughout the County.

### **Objective 2.2. Promote public EV charging.**

Key Initiative 2.2.2. Operationalize existing analyses regarding public EV chargers on private-sector sites, including sites in underserved communities.

	2024-25	2026-27	2028-29
Action	Via targeted outreach, recruit at least 6 houses of worship, nonprofit organizations, and/or businesses to develop public-private partnerships with the County to deploy public chargers at their properties.  Implement one or more partnership approaches and assess applicability for broader deployment.		
Lead	DES-OSEM		
Support	APS, CPHD-ISD, DES-Transportation, Non-Profit Organizations, Zoning		
Cost to County Government	<b>\$ - \$\$\$</b> (depends on pilot scope/scale)		
Impact on CNTMP Goal 2		* _ **	

Benefits	
G	Public chargers on private-sector properties could draw new patrons to related businesses and services.
Р	This approach provides opportunities for partnership with local houses of worship, nonprofit organizations, and/or businesses.
Α	Providing access to EV charging at these locations may encourage EV adoption nearby.
D	Piloting one or more partnership approaches may help streamline later full-scale deployments based on lessons learned.
Ε	Public chargers may support residents who do not have access to off-street parking or who cannot afford their own EV chargers.

Goal 2

Support an array of EV charging options throughout the County.

### Objective 2.2. Promote public charging.

Key Initiative 2.2.3. Continuously track and pilot emerging public EV charging technologies.

	2024-25	2026-27	2028-29
Action	Research and summarize emerging technologies including technologies to support lower-cost charger deployments at parking structures (to support businesses and multi-unit dwellings). As relevant, recommend one or more pilot approaches.		Initiate limited pilot(s) of one or more technologies and assess applicability for broader deployment.
Lead	DES-OSEM		
Support	Academic Institutions, DES-Transportation, Research Institutions, Technical Organizations (such as IAEE, ACEEE)		
Cost to County Government	\$\$ - \$\$\$ (depends on pilot scope/scale)		
Impact on CNTMP Goal 2		* = **	

Benefits	
Р	Investigating and/or deploying emerging technologies may offer opportunities for collaboration with academic institutions, research institutions, and other partners.
A	Providing access to public EV charging may encourage EV adoption nearby. Emerging charging technologies may offer opportunities for myriad vehicle types in addition to passenger vehicles.
D	Piloting emerging charging technologies may help streamline later full-scale deployments based on lessons learned.

Goal 2

Support an array of EV charging options throughout the County.

### Objective 2.3. Support clear processes for EV charger deployments at residences and businesses.

Key Initiative 2.3.1. Apply design, accessibility, and safety standards for residential and commercial EV chargers.

	2024-25	2026-27	2028-29	
Action	Benchmark Arlington County's standards against best practices.	Develop proposal(s) for new or revised standards for Arlington County.	Recommend proposed standards to the County Board.	
Lead	DES-DSB			
Support	DES-OSEM, DES-Transportation, Fire Department			
Cost to County Government	\$			
Impact on CNTMP Goal 2	*			

Benefits	
D	Clear standards for infrastructure design, accessibility, and safety may increase the ease of EV charger deployment in the County.
A	Increased ease of charger deployment may encourage EV adoption.
Ε	Safety and accessibility standards for EV chargers may improve access for individuals with a range of abilities.

Goal 2

Support an array of EV charging options throughout the County.

### Objective 2.3. Support clear processes for EV charger deployments at residences and businesses.

Key Initiative 2.3.2. Consider streamlined and/or discounted permitting processes for EV chargers.

	2024-25	2026-27	2028-29	Benefits	
Action	Benchmark Arlington County's existing EV charger permitting processes against best practices in other communities.	Develop proposal(s) for new or revised processes.	Recommend proposed (new or revised) process to the DES-DSB.	D	Improved or streamlined permitting processes may increase the ease and/or speed of EV charger deployment in the County.
Lead	CPHD-ISD				
Support	AIRE, DES-DSB				
Cost to County Government	\$		A	Increased ease of charger deployment may encourage EV adoption.	
Impact on CNTMP Goal 2					

Goal 2

Support an array of EV charging options throughout the County.

Objective 2.3. Support clear processes for EV charger deployments at residences and businesses.

Key Initiative 2.3.3. Coordinate with Dominion Energy to streamline utility processes for EV charger deployments.

	2024-25	2026-27	2028-29
Action	Engage Dominion Energy representatives to review existing utility processes.	Prepare and deliver proposal for streamlined processes to Dominion Energy.	
Lead	DES-OSEM		
Support	CAO, CPHD-ISD		
Cost to County Government	\$		
Impact on CNTMP Goal 2	*		

Benefits	
A	Access to EV charging in the right-of-way could alleviate consumer concerns regarding where to charge and increase EV adoption
Р	Right-of-way charging may provide opportunities for public-private partnerships.
D	Piloting approaches of this nature may help streamline later full-scale deployments based on lessons learned.

# Goal 3. Support phased decarbonization of the County fleet.

### Goal 3: Support phased decarbonization of the County fleet

Objective	Key Initiative	Action		Timeline	
Objective	Key initiative			2026-27	2028-29
3.1. Right-size the County	3.1.1. Continue post-COVID review of the quantity of vehicles in the County fleet.	Identify opportunities for reducing fleet vehicle assignments.	<del></del>		$\longrightarrow$
fleet.	3.1.2. Continue review of vehicle size requirements to ensure acquisition of the smallest County fleet vehicle to meet user needs.	Identify opportunities to diversify fleet vehicle typesi.e., offsetting vehicle use with bicycles and/or other micromobility devices.	•		$\longrightarrow$
	<ul> <li>3.2.1. Establish the following targets for non-public safety County and ART fleet vehicles subject to market availability:</li> <li>For passenger cars, 60% ZEVs by 2025 and 100% ZEVs by 2032.</li> <li>For light-duty trucks/SUVs, 50% ZEVs by 2030 and 100% ZEVs by 2037.</li> <li>For medium- and heavy-duty vehicles (M/HDV) and equipment, continue reviewing technology feasibility and market availability.</li> </ul>	For passenger cars, achieve 60% ZEVs by 2025.	$\leftarrow$	$\longrightarrow$	
3.2. Transition the County fleet to zero-emission vehicles (ZEVs).		<ul> <li>For passenger cars, continue toward target of 100% ZEVs by 2032.</li> </ul>			$\longleftrightarrow$
		• For light-duty trucks/SUVs, continue toward target of 50% ZEVs by 2030 and 100% ZEVs by 2037.	$\longleftarrow$		$\longrightarrow$
		<ul> <li>For M/HDV, assess available technologies for the County fleet including costs, availability, and early deployment outcomes. As relevant, recommend one or more vehicle types for pilots.</li> </ul>	<del>-</del>	<b></b>	
		o Pilot one or more M/HDV technologies in the County fleet.			$\longleftrightarrow$
		<ul> <li>For M/HDV, pilot battery electric buses (BEB) in the ART bus fleet and develop an evaluation plan with performance metrics</li> </ul>	$\longleftrightarrow$		
		o Continue the pilot program and implement an evaluation of the program		$\longleftrightarrow$	
		o Publish an evaluation of the BEB pilot program			$\longleftrightarrow$
	3.2.2. Explore grants and other incentives to support EV acquisition for the County government fleet and APS fleet.	<ul> <li>Inventory opportunities for grants and other funding to support fleet EV deployments and (as relevant) recommend funding opportunities to pursue.</li> </ul>	$\longleftrightarrow$		
		<ul> <li>Submit one or more funding program application(s).</li> </ul>		$\longleftrightarrow$	
3.3. Strategically deploy charging infrastructure to support electric fleet vehicles.	3.3.1. Continue ongoing efforts to deploy charging infrastructure to support the County EV fleet.	Research and summarize emerging technologies including technologies to support lower-cost charger deployments at parking structures. As relevant, recommend one or more pilot approaches.	<del></del>	$\longrightarrow$	
		<ul> <li>Initiate limited pilot(s) of one or more emerging fleet charging technologies and assess applicability for broader deployment.</li> </ul>			$\longleftrightarrow$
	3.3.2. Explore grants/incentives to support deployment of County fleet vehicle charging infrastructure.	<ul> <li>Inventory opportunities for grants and other funding to support fleet EV charging infrastructure deployments and (as relevant) recommend funding opportunities to pursue.</li> </ul>	<del></del>	$\longrightarrow$	
		<ul> <li>Submit one or more funding program application(s).</li> </ul>		1	$\longleftrightarrow$
	3.3.3. Explore possible mechanisms to support cost-efficient at-home charging for County staff with take-home vehicles.	Design and implement pilot program with Police Department to support at-home charging for electric law enforcement vehicles.	$\longleftrightarrow$		
		o Continue the pilot and begin evaluating the program.		$\longleftrightarrow$	
		Complete evaluation of the pilot program.			$\longleftrightarrow$

Goal 3

Support phased decarbonization of the County fleet.

#### **Objective 3.1. Right-size the County fleet.**

Key Initiative 3.1.1. Continue post-COVID review of the quantity of vehicles in the County fleet.

	2024-25	2026-27	2028-29
Action	Identify opportunities for reducing fleet vehicle assignments.		
Lead	DES-Equipment Bureau		
Support	DES-Finance, Other Departments' Corresponding Agencies		
Cost to County Government	\$ (negligible cost)		
Impact on CNTMP Goal 3	*		

Benefits	
С	Reducing fleet vehicle assignments may reduce fleet vehicle deployments and their associated costs.
G	General fund budget savings associated with any reduction in fleet vehicle quantity could be deployed to support other County decarbonization efforts.

Goal 3

Support phased decarbonization of the County fleet.

#### **Objective 3.1. Right-size the County fleet.**

Key Initiative 3.1.2. Continue review of vehicle size requirements to ensure acquisition of the smallest County fleet vehicle to meet user needs.

	2024-25	2026-27	2028-29
Action	Identify opportunities to diversify fleet vehicle typesi.e., offsetting vehicle use with bicycles and/or other micromobility devices.		
Lead	DES-OSEM		
Support	DES-Equipment Bureau, DPR		
Cost to County Government	\$ (negligible cost)		
Impact on CNTMP Goal 3	*		

Benefits	
Α	Diversifying fleet vehicle types may increase adoption and use of micromobility devices and other clean transportation options.
С	Substituting existing fleet vehicles with bicycles and/or other micromobility devices may reduce the costs associated with new or replacement vehicles for the fleet.
D	There may be reduced resistance or budget challenges associated with acquiring bicycles and/or other micromobility devices, which could increase the vehicle deployment speed.
G	General fund budget savings associated with any reduction in fleet vehicle sizes could be deployed to support other County decarbonization efforts.

Goal

Support phased decarbonization of the County fleet.

Objective 3.2. Transition the County fleet to zero-emission vehicles (ZEVs).

Key Initiative 3.2.1. Establish the following targets for non-public safety County and ART fleet vehicles subject to market availability:

- For passenger cars, 60% ZEVs by 2025 and 100% ZEVs by 2032.
- For light-duty trucks/SUVs, 50% ZEVs by 2030 and 100% ZEVs by 2037.
- For medium- and heavy-duty vehicles and equipment, continue reviewing technology feasibility and market availability.

**Note:** Key Initiative 3.2.1. has four sets of associated actions – this slide presents the first.

	2024-25	2026-27	2028-29
Action	For passenger cars, achieve 60% ZEVs by 2025.	For passenger progress towar 100% ZEVs by	d target of
Lead	DES-Equipment Bureau		
Support	DES-OSEM, Utilities		
Cost to County Government	\$\$\$		
Impact on CNTMP Goal 3	*	*	

Benefits	
С	Because the costs to operate and maintain many ZEVs is less than their traditional counterparts, transitioning fleet vehicles to ZEVs may reduce the total cost of ownership for fleet vehicles.
A	Transitioning fleet vehicles to ZEVs increases adoption of these clean transportation technologies.

Goal 3

Support phased decarbonization of the County fleet.

Objective 3.2. Transition the County fleet to zero-emission vehicles (ZEVs).

Key Initiative 3.2.1. Establish the following targets for non-public safety County and ART fleet vehicles subject to market availability:

- For passenger cars, 60% ZEVs by 2025 and 100% ZEVs by 2032.
- For light-duty trucks/SUVs, 50% ZEVs by 2030 and 100% ZEVs by 2037.
- For medium- and heavy-duty vehicles and equipment, continue reviewing technology feasibility and market availability.

**Note:** Key Initiative 3.2.1. has four sets of associated actions – this slide presents the second.

	2024-25	2026-27	2028-29
Action	For light-duty trucks/SUVs, continue progress toward 50% ZEVs by 2030 and 100% ZEVs by 2037.		
Lead	DES-Equipment Bureau		
Support	DES-OSEM, Utilities		
Cost to County Government	\$\$	\$\$	
Impact on CNTMP Goal 3	*	*	

Benefits	
С	Because the costs to operate and maintain many ZEVs is less than their traditional counterparts, transitioning fleet vehicles to ZEVs may reduce the total cost of ownership for fleet vehicles.
A	Transitioning fleet vehicles to ZEVs increases adoption of these clean transportation technologies.

Goal 3

Support phased decarbonization of the County fleet.

Objective 3.2. Transition the County fleet to zero-emission vehicles (ZEVs).

Key Initiative 3.2.1. Establish the following targets for non-public safety County and ART fleet vehicles subject to market availability:

- For passenger cars, 60% ZEVs by 2025 and 100% ZEVs by 2032.
- For light-duty trucks/SUVs, 50% ŽEVs by 2030 and 100% ŽEVs by 2037.
- For medium- and heavy-duty vehicles and equipment, continue reviewing technology feasibility and market availability.

**Note:** Key Initiative 3.2.1. has four sets of associated actions – this slide presents the third.

	2024-25	2026-27	2028-29
Action	For M/HDV, assess available technologies for the County fleet including costs, availability, and early deployment outcomes. As relevant, recommend one or more vehicle types for pilots.  Pilot one or more M/HDV technologies in the County fleet.		hnologies
Lead	DES-Equipment Bureau		
Support	DES-OSEM, Utilities		
Cost to County Government	\$\$\$		
Impact on CNTMP Goal 3	**		

Benefits	
С	Because the costs to operate and maintain many ZEVs is less than their traditional counterparts, transitioning fleet vehicles to ZEVs may reduce the total cost of ownership for fleet vehicles.
A	Transitioning fleet vehicles to ZEVs increases adoption of these clean transportation technologies.
D	Piloting zero-emission M/HDV technologies may help streamline later full-scale deployments based on lessons learned.

Goal

Support phased decarbonization of the County fleet.

Objective 3.2. Transition the County fleet to zero-emission vehicles (ZEVs).

Key Initiative 3.2.1. Establish the following targets for non-public safety County and ART fleet vehicles subject to market availability:

- For passenger cars, 60% ZEVs by 2025 and 100% ZEVs by 2032.
- For light-duty trucks/SUVs, 50% ZEVs by 2030 and 100% ZEVs by 2037.
- For medium- and heavy-duty vehicles and equipment, continue reviewing technology feasibility and market availability.

**Note:** Key Initiative 3.2.1. has four sets of associated actions – this slide presents the fourth.

	2024-25	2026-27	2028-29
Action	For M/HDV, pilot battery electric buses (BEB) in the ART bus fleet and develop an evaluation plan with performance metrics	Continue the pilot and begin evaluating the program	Publish an evaluation of the BEB pilot program
Lead	DES-Transit Bureau		
Support	DES-OSEM, DES-Facilities		
Cost to County Government	\$\$\$		
Impact on CNTMP Goal 3	***		

Benefits	
A	Pilot program will increase adoption of BEBs within the County.
D	Piloting BEBs may help streamline later full-scale deployments based on lessons learned.
Т	Use of public transit may alleviate traffic congestion.

Goal 3

Support phased decarbonization of the County fleet.

#### Objective 3.2. Transition the County fleet to zero-emission vehicles (ZEVs).

Key Initiative 3.2.2. Explore grants and other incentives to support EV acquisition for the County government fleet and APS fleet.

	2024-25	2026-27	2028-29
Action	Inventory opportunities for grants and other funding to support fleet EV deployments and (as relevant) recommend funding opportunities to pursue.	Submit one or more funding program application(s).	
Lead	DES-OSEM		
Support	DES-Equipment Bureau, DES-Transportation		
Cost to County Government	\$\$		
Impact on CNTMP Goal 3	*		

Benefits	
С	Grants may present opportunities to offset the costs of fleet EV deployments.
A	Successful grant applications may enable increased EV adoption and use by the County fleet.
Р	Investigating and/or deploying technologies such as BEBs may offer opportunities for collaboration with academic institutions, research institutions, and other partners.

Goal 3

Support phased decarbonization of the County fleet.

Objective 3.3. Strategically deploy charging infrastructure to support electric fleet vehicles.

Key Initiative 3.3.1. Continue ongoing efforts to deploy charging infrastructure to support the County's EV fleet.

	2024-25	2026-27	2028-29	В
Action	technologies including technologies to support lower-cost charger deployments at parking structures. As relevant, more emerging to charging technologies and		pilot(s) of one or more emerging fleet charging technologies and assess applicability for broader	
Lead	DES-FMB			
Support	DES-Equipment Bureau, DES-OSEM			
Cost to County Government	\$\$ - \$\$\$ (depends on pilot scope/scale)			
Impact on CNTMP Goal 3	* _ **			

Benefits	
Р	Investigating and/or deploying emerging technologies may offer opportunities for collaboration with academic institutions, research institutions, and other partners.
D	Piloting emerging fleet charging technologies may help streamline later full-scale deployments based on lessons learned.
A	Lower-cost charging options may reduce budgetary challenges associated with EV adoption and use by the County fleet.

Goal 3

Support phased decarbonization of the County fleet.

Objective 3.3. Strategically deploy charging infrastructure to support electric fleet vehicles.

Key Initiative 3.3.2. Explore grants/incentives to support deployment of fleet vehicle charging infrastructure.

	2024-25	2026-27	2028-29
Action	Inventory opportunities for grants and other funding to support fleet EV charging infrastructure deployments and (as relevant) recommend funding opportunities to pursue.	Submit one or more funding program application(s).	
Lead	AIRE		
Support	DES-Equipment Bureau		
Cost to County Government	\$\$		
Impact on CNTMP Goal 3	*		

Benefits	
С	Grants may present opportunities to offset the costs of fleet charging infrastructure deployments.
A	Successful grant applications may reduce budgetary challenges associated with EV charger deployment and enable increased EV adoption and use by the County fleet.

Goal 3

Support phased decarbonization of the County fleet.

Objective 3.3. Strategically deploy charging infrastructure to support electric fleet vehicles.

Key Initiative 3.3.3. Explore possible mechanisms to support cost-efficient at-home charging for County staff with take-home vehicles.

	2024-25	2026-27	2028-29
Action	Design and implement pilot program with Police Department to support athome charging for electric law enforcement vehicles.	Continue the pilot and begin evaluating the program.	Complete evaluation of the pilot program.
Lead	Police Department, DES-FMB		
Support	DES-Equipment Bureau, DES-Finance, DES-OSEM, DMF, HRD		
Cost to County Government	\$\$ - \$\$\$ (depends on pilot scope/scale)		
Impact on CNTMP Goal 3	**	***	

Benefits	
D	Piloting an at-home fleet EV charging program for County staff may help streamline later full-scale deployments based on lessons learned.
A	At-home fleet EV charging may reduce budgetary challenges associated with EV charger deployment on County property and enable increased EV adoption and use by the County fleet.
G	Costs associated with deploying at-home chargers is likely lower than would be associated with deploying chargers on County property.  Associated general fund budget savings could be deployed to support other County decarbonization efforts

# **Next Steps**



**Share final CNTMP with stakeholders.** 



**Publish 5-Year Action Program (mid-2024).** 



Migrate Action Program actions to CEP Roadmap for years 3-5.

