



Nevada Division of Environmental Protection

Clean Cars Nevada

On the Road to a Cleaner Nevada

April 27, 2021

Presented by:

Jeffrey Kinder, Deputy Administrator

Danilo Dragoni, Chief, BAQP

Sig Jaunaraajs, Supervisor, BAQP

AIR QUALITY IMPACTS ANALYSIS 1 - STATE OF THE FLEET

APRIL 27, 2021 @ 9:00 TO 10:00 AM



Presentation Outline

- Introduction
- Fleet Statistics
 - Data Sources
 - State of the Fleet
 - New LDV Sales
 - Manufacturer Sales
 - Sales by County
 - ZEV Sales

AIR QUALITY IMPACTS ANALYSIS 1 - STATE OF THE FLEET

APRIL 27, 2021 @ 9:00 TO 10:00 AM



Presentation Outline (continued)

- ZEV Credit Requirements
- ZEV Program
 - Compliance for Nevada
 - Comparison w/Oregon
- Next Steps
 - Estimating Future ZEV Credits
 - Estimating Emission Reductions

AIR QUALITY IMPACTS ANALYSIS 1 - STATE OF THE FLEET

APRIL 27, 2021 @ 9:00 TO 10:00 AM



Presentation Outline (continued)

- The Regulatory Process and Opportunities for Public Input and Participation
- Where to Find Out More
- Public Comments
- Next Event
- Contact Us



Clean Cars Nevada is Proposing the Evaluation and Potential Adoption of Two New Regulatory Programs



Low Emission Vehicle (LEV) Program - Meet emission requirements that reduce greenhouse gases, criteria air pollutants, and hazardous air pollutants.



Zero Emission Vehicle (ZEV) Program - Introduction of clean vehicle technology in Nevada.



The goal of today's webinar is to present statistics on Nevada's fleet of passenger cars and light-duty trucks. This includes all registered light-duty vehicles as well as recent new light-duty vehicle sales.

The provisions of this regulation set forth the ZEV percentage requirements for new motor vehicles in this State beginning with Model Year 2025.

FLEET STATISTICS – DATA SOURCES

Vehicle Sales for calendar years 2015-2020

- From Electronic Dealer Report of Sale Program. Provided by DMV.
- QA/QC and processing of data provided a list of all new vehicles, their makes, and model years sold between 2015 and 2020.

Vehicle Credits for all model years sold in 2015-2020

- Assigned to each vehicle using Executive Orders from California Air Resource Board
(<https://ww3.arb.ca.gov/msprog/onroad/cert/cert.php#1>)

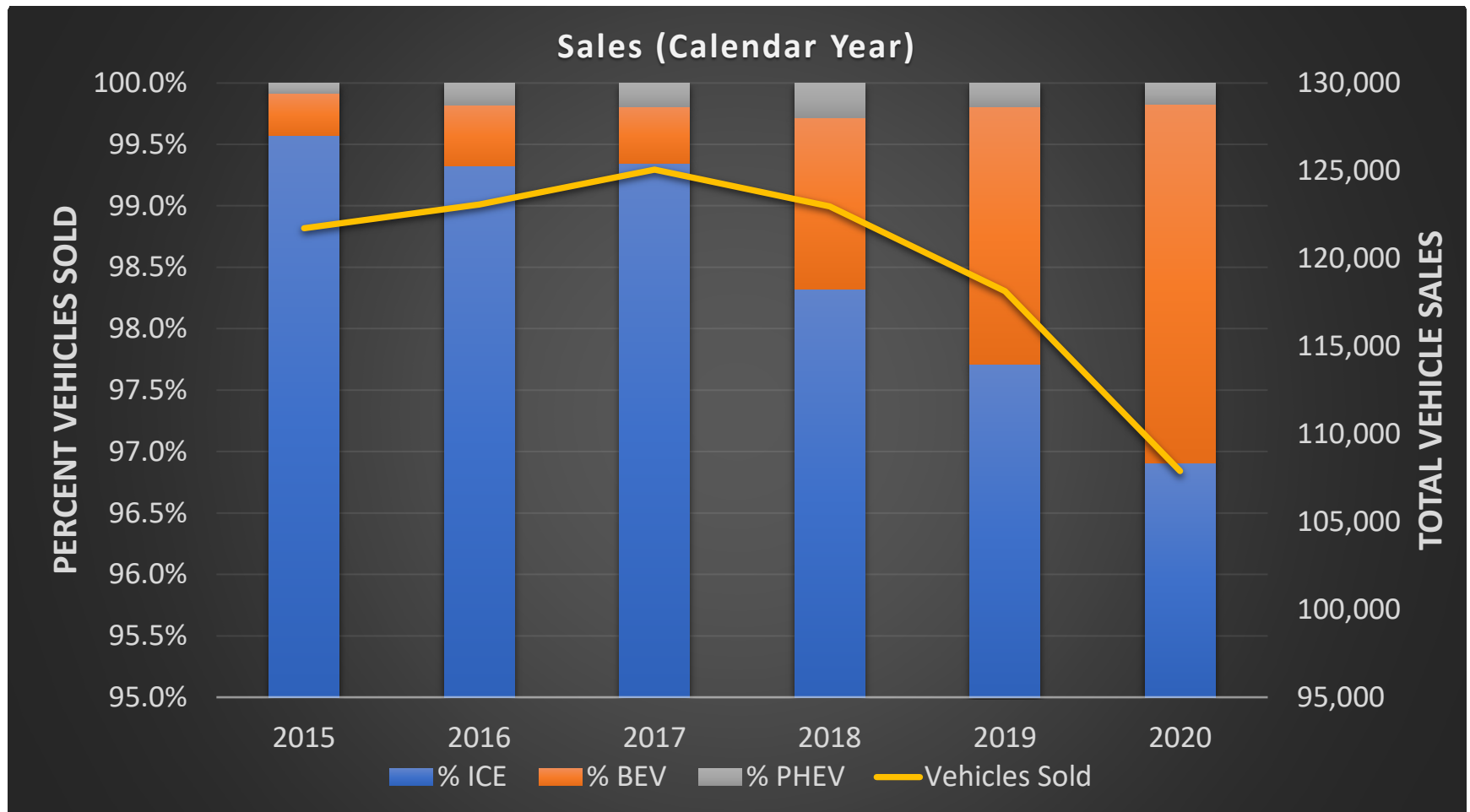
FLEET STATISTICS – STATE OF THE FLEET

- 2,000,000 – Light-Duty Vehicles Registered in Nevada
 - 60% registered in Clark, 17% registered in Washoe, and the remainder are registered throughout the rest of the state
- 119,356 – Average Annual New Light-Duty Vehicles Sales from 2015-2020
- Passenger Cars make up 35%, Light-Duty Trucks 65% of New Registrations for Light-Duty Vehicles
- 3% – Average Fraction of New Light-Duty Vehicles Sales in Nevada that are ZEV or TZEVs

Why are these statistics important to our analysis?

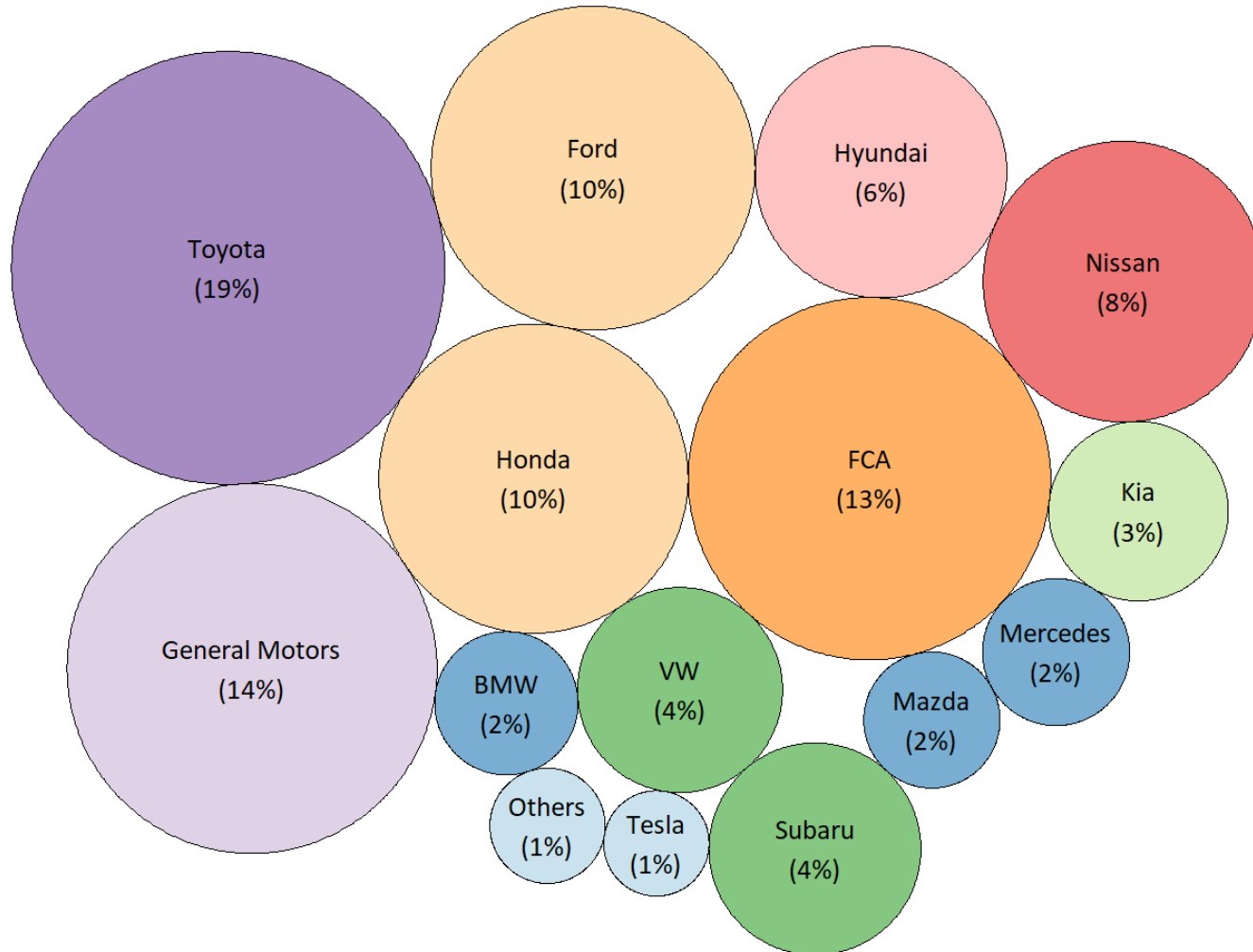
FLEET STATISTICS – NEW LDV SALES

Total LDV Sales and Percentage of BEV and PHEV



FLEET STATISTICS – MANUFACTURER SALES

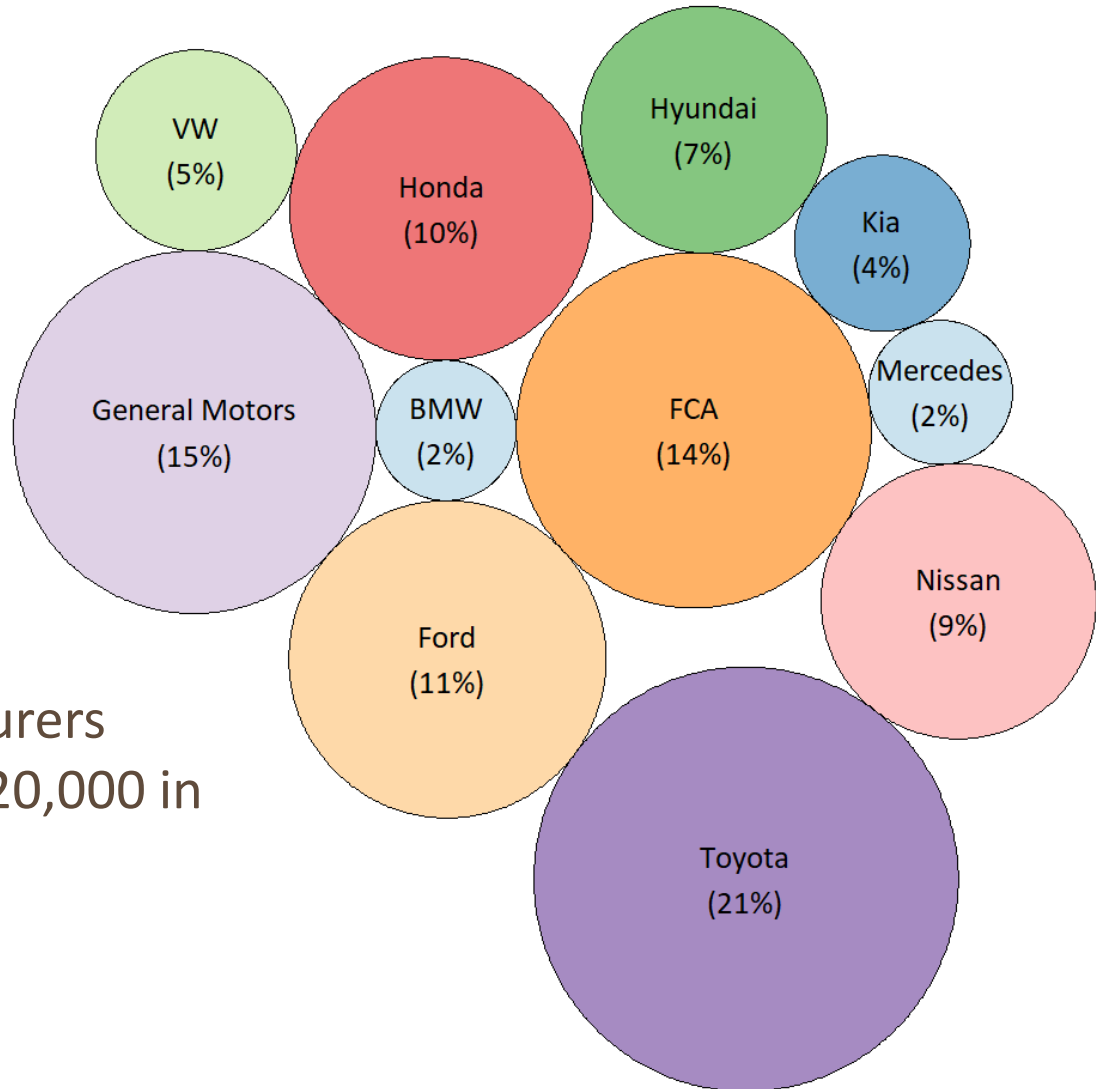
2015-2020 Average LDV Sales by Manufacturer



FLEET STATISTICS – MANUFACTURER SALES

(CONTINUED)

2015-2020 Average LDV
Sales by Large Volume
Manufacturer



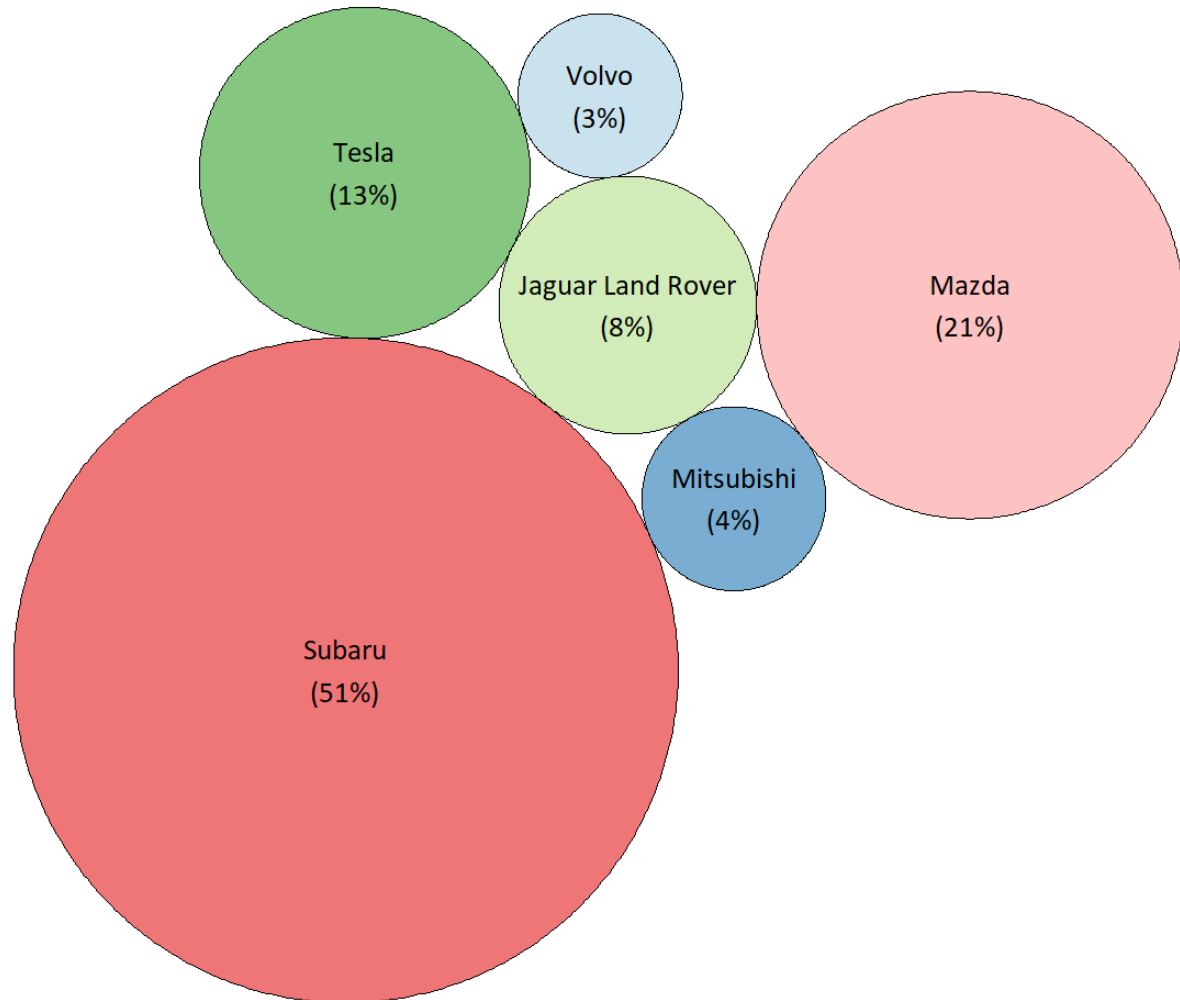
Large Volume Manufacturers
have sales greater than 20,000 in
California

FLEET STATISTICS – MANUFACTURER SALES

(CONTINUED)

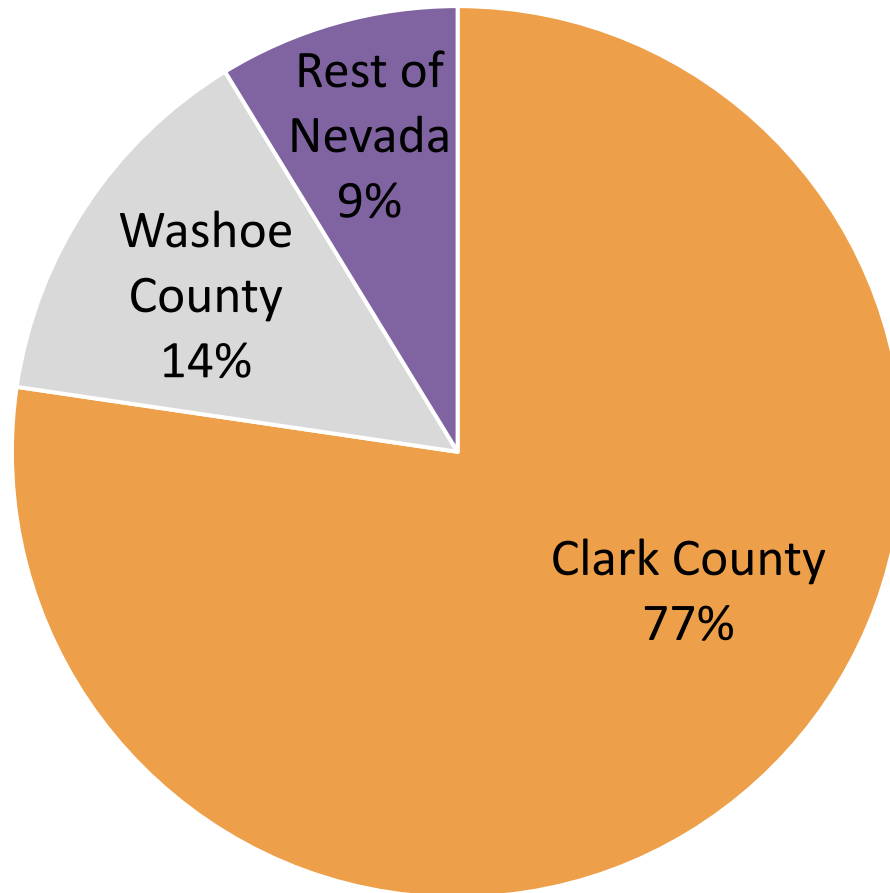
2015-2020 Average LDV
Sales by Intermediate
Volume Manufacturer

Intermediate Volume
Manufacturers have
sales 4,500 – 20,000 in
California

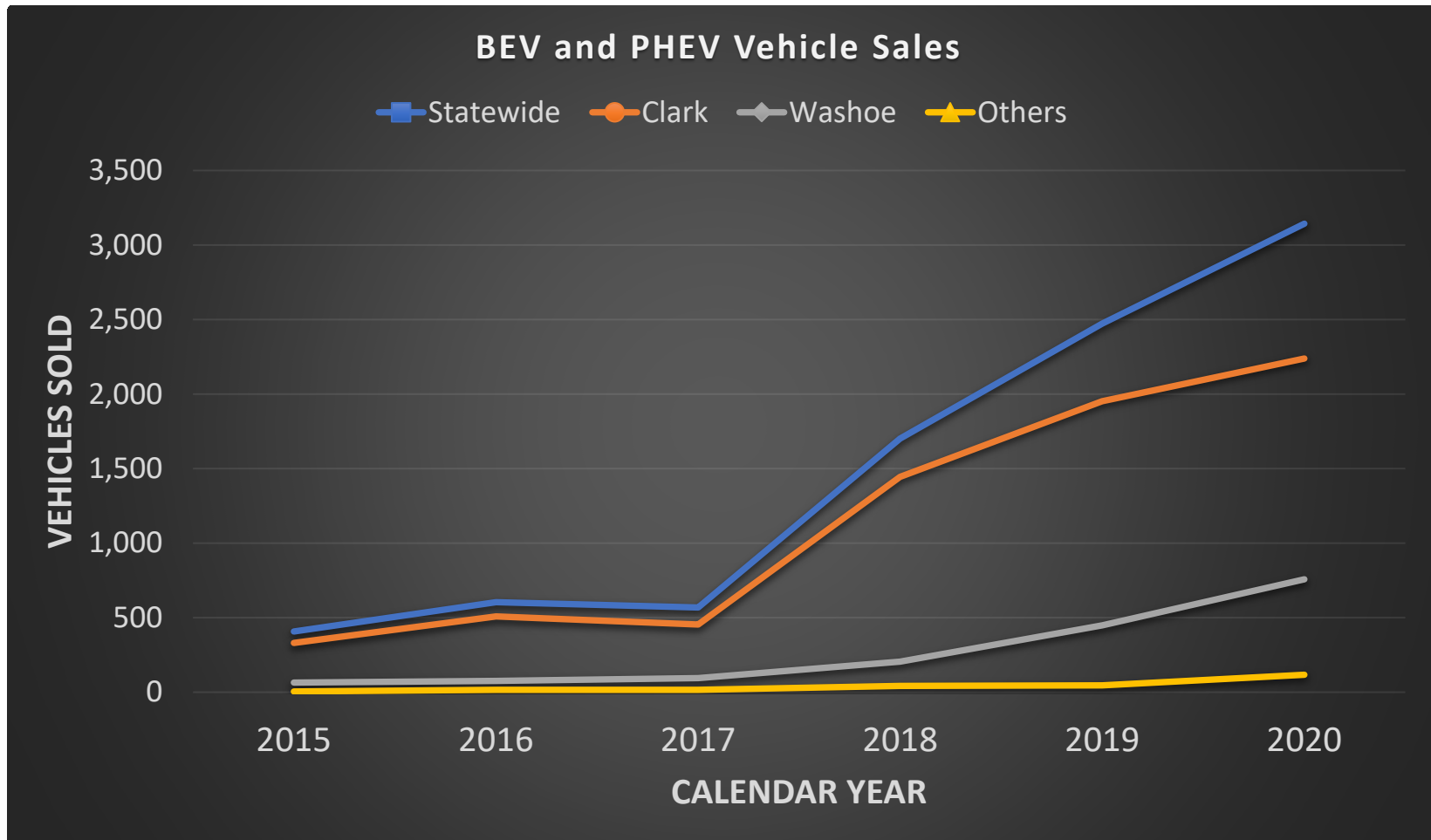


FLEET STATISTICS – SALES BY COUNTY

Location of new light-duty vehicle sales in Nevada, 2015-2020

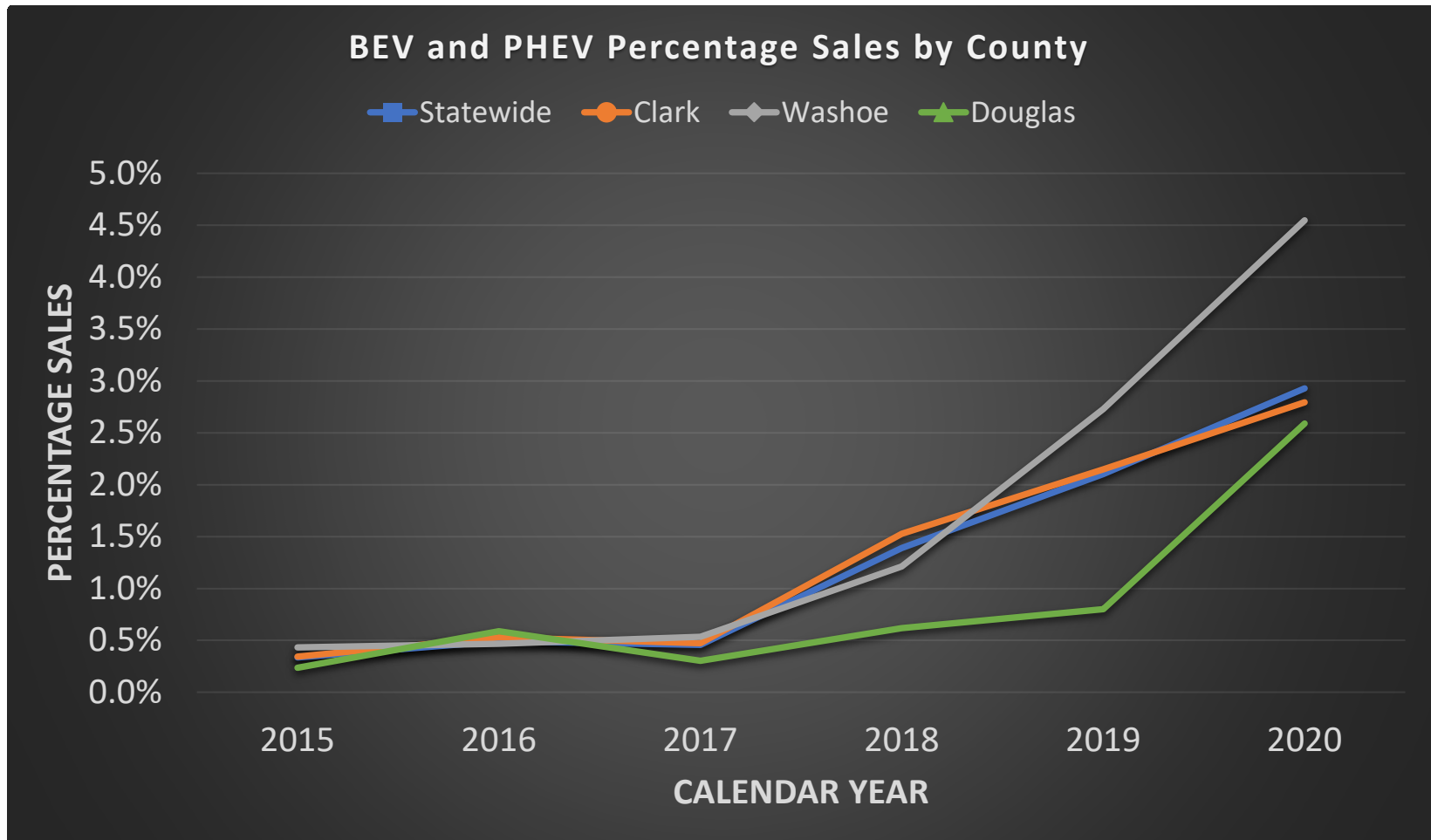


FLEET STATISTICS – ZEV SALES



About 35% increase in past 3 years

FLEET STATISTICS – ZEV SALES (CONTINUED)



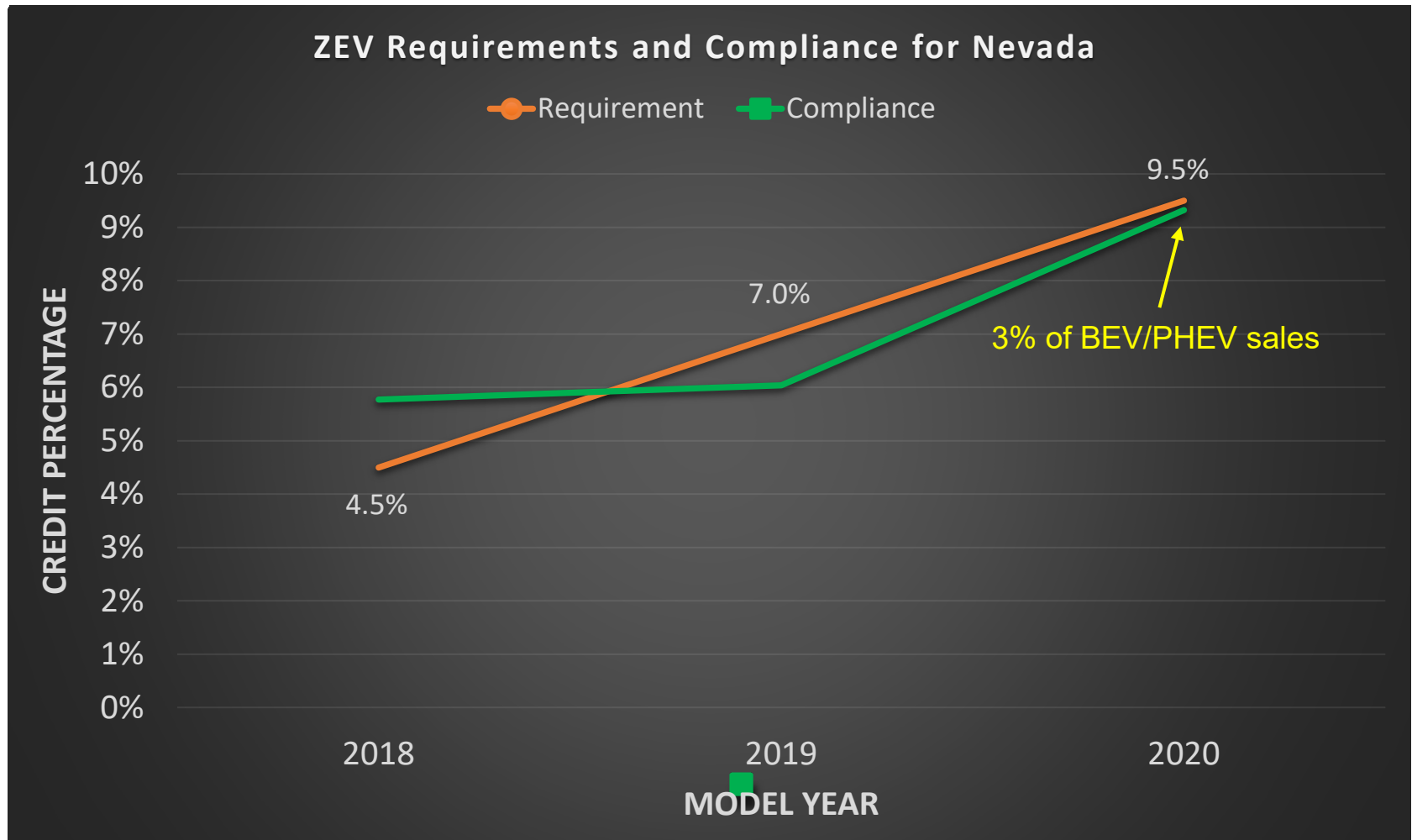
ZEV CREDIT REQUIREMENTS

Model Year	Credit Percentage Requirement	Percentage of Sales
2018	4.5%	
2019	7.0%	
2020	9.5%	~3.0%
2021	12.0%	
2022	14.5%	
2023	17.0%	
2024	19.5%	
2025 and subsequent	22.0%	8.0% (estimated in some third-party report)

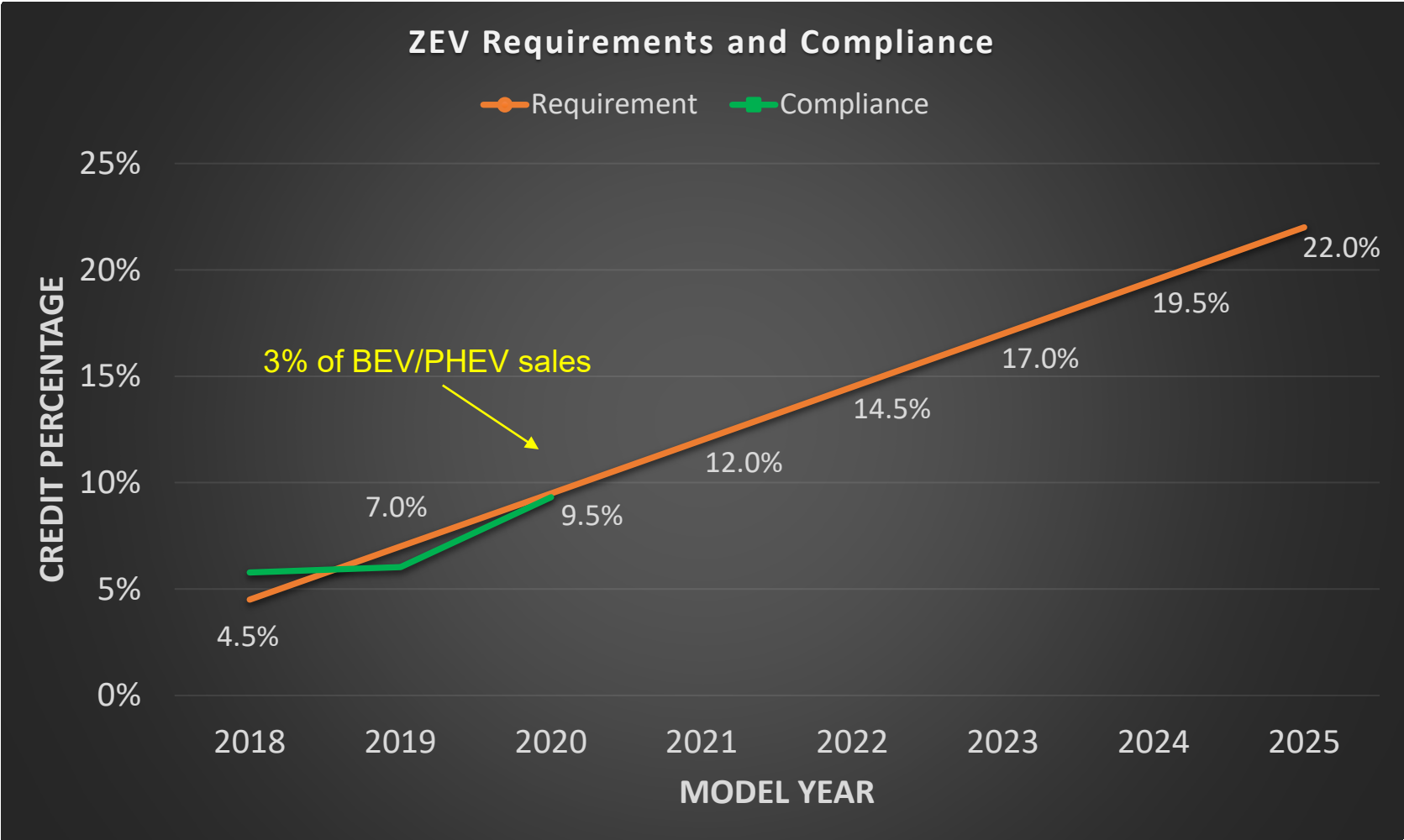
ZEV Credit Percentages **are not** Percentage of Sales

ZEV PROGRAM - COMPLIANCE FOR NEVADA

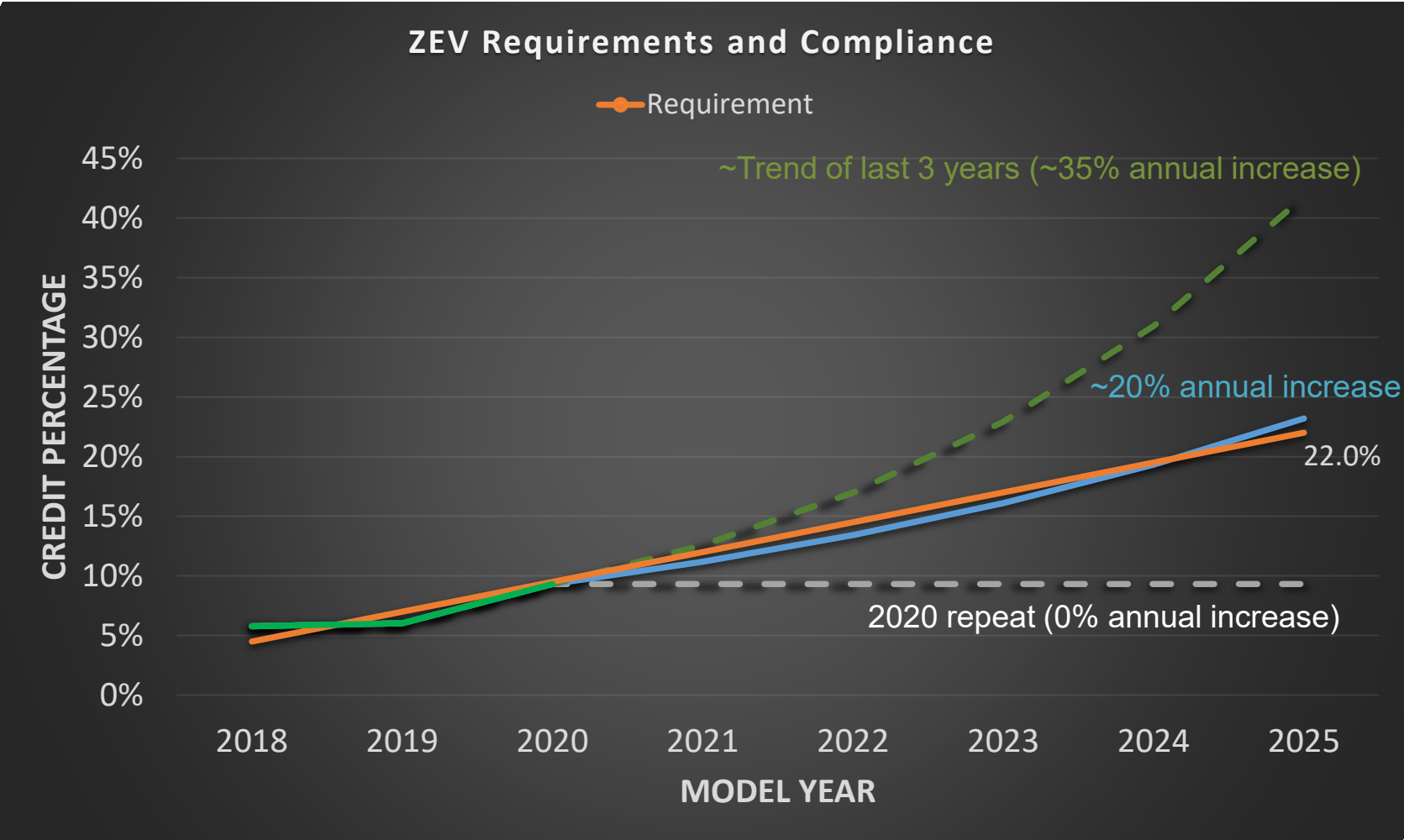
If the ZEV Program was in effect today and assuming total vehicle sales of approximately 120,000 LDVs



ZEV PROGRAM - COMPLIANCE FOR NEVADA (CONTINUED)



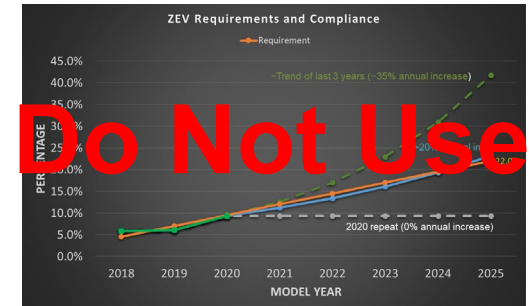
ZEV PROGRAM - COMPLIANCE FOR NEVADA (CONTINUED)



ZEV PROGRAM - COMPLIANCE FOR NEVADA (CONTINUED)

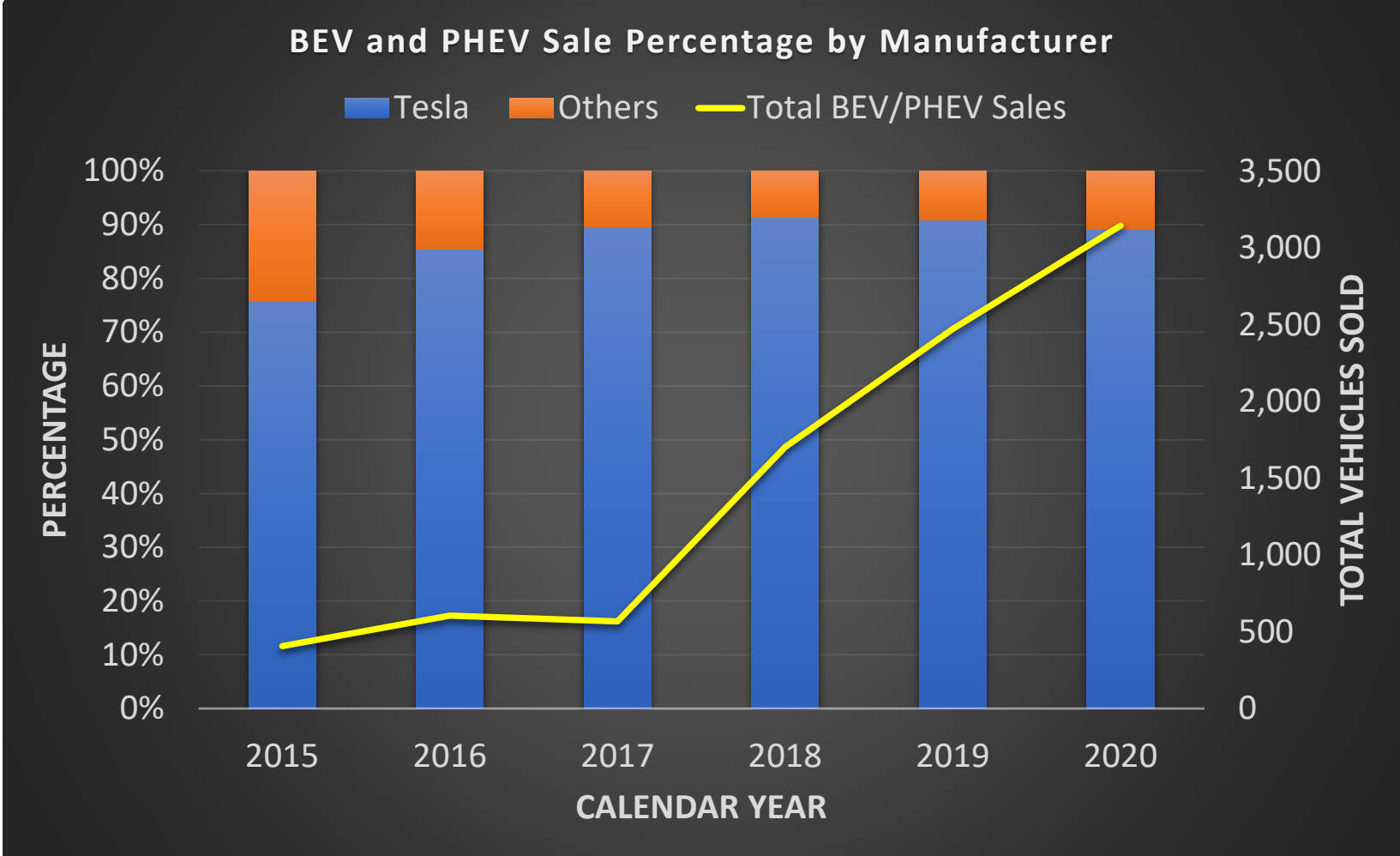
So many factors that were oversimplified or not considered

- Credits assigned by manufacturer, not statewide
- No increase in overall sales of LDVs
- Same annual make-up of new BEV/PHEV sales
- No change in BEV/PHEV model availability
- No change in mileage range of BEV or PHEV
- No change in technology (e.g., BEV/PHEV Light-Duty Trucks)



ZEV PROGRAM - COMPLIANCE FOR NEVADA (CONTINUED)

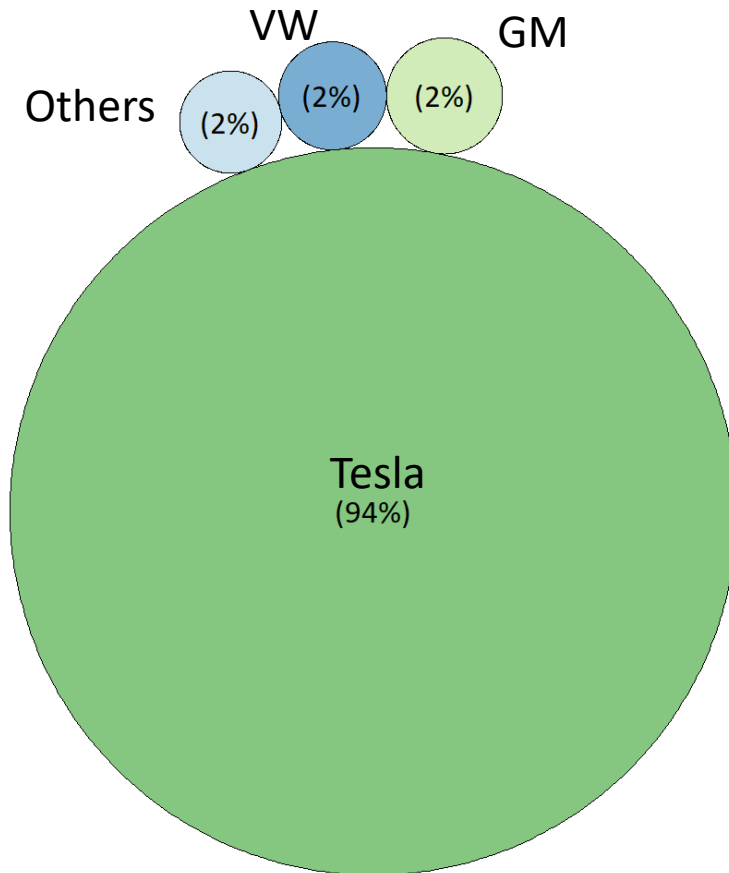
Compliance is at the manufacturer level



ZEV PROGRAM – COMPARISON W/OREGON

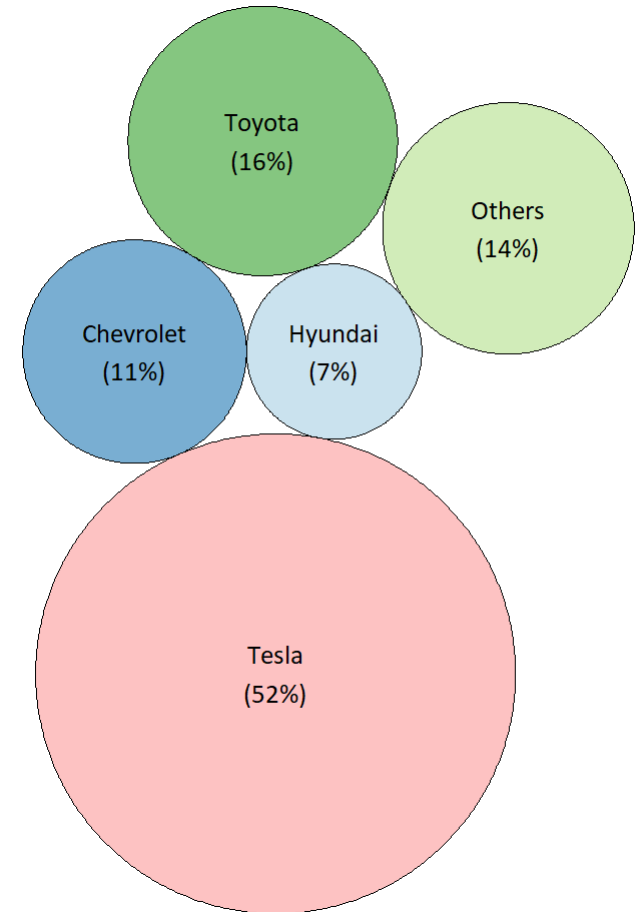
Nevada (MY 2020)

Total BEV/PHEV sales = 2,805



Oregon (MY 2020)

Total BEV/PHEV sales = 2,430



NEXT STEPS - ESTIMATING FUTURE ZEV CREDITS

- Estimating future ZEV credits will consider:
 - Light-duty fleet statistics, recent ZEV sales, and potential ZEV & TZEV sales trends,
 - Expected technology improvements in battery capacity, and
 - Individual manufacturer plans for future ZEV & TZEV offerings.
- NDEP will estimate the ZEV credits that will be generated during 2025, the first year of compliance.
- This includes projections of credits earned by large and intermediate volume manufacturers.

*

*

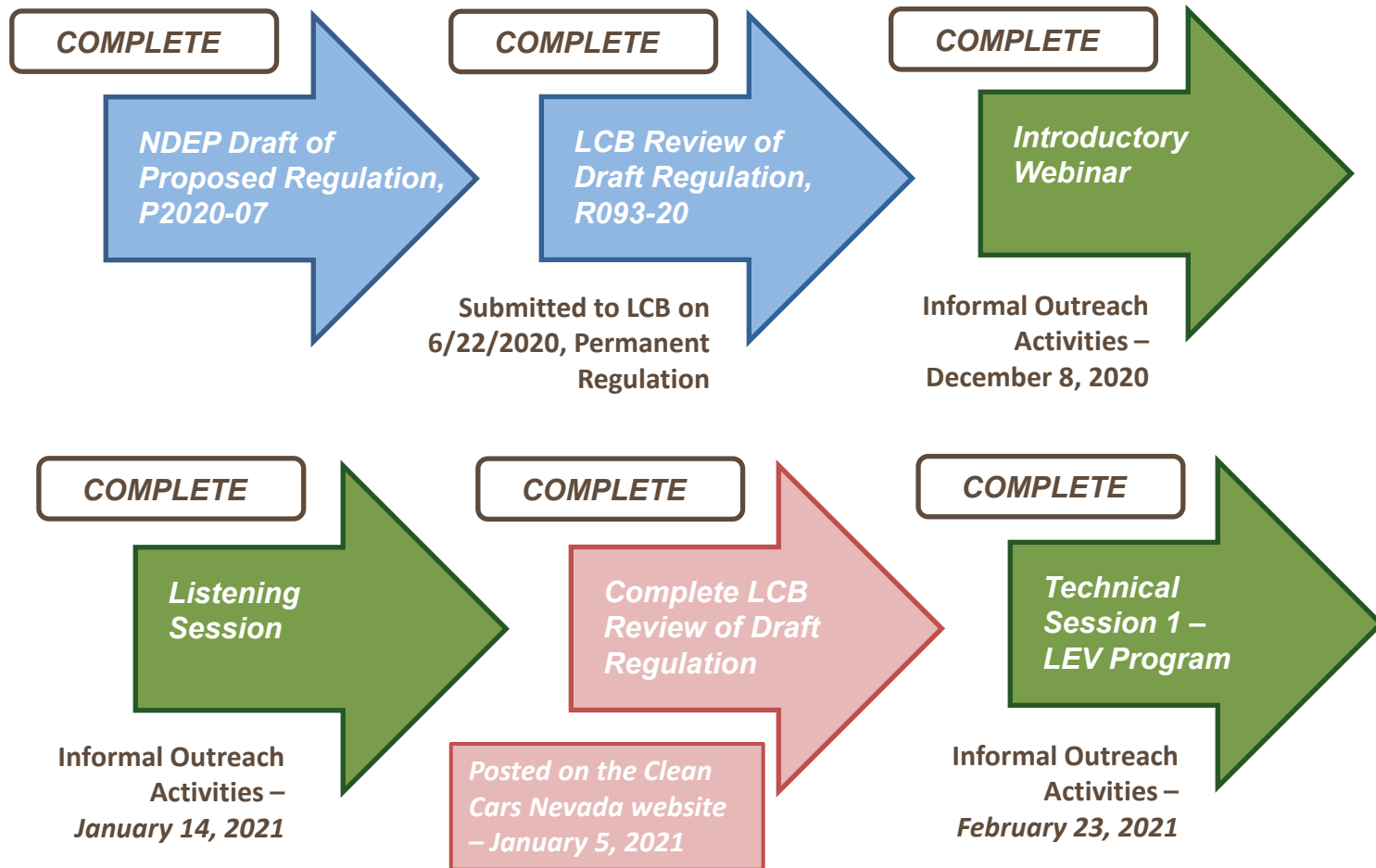
*

- The ZEV credit analysis will be used to better inform decisionmakers about the likelihood of meeting the minimum compliance credit levels and the potential need for early credits and/or initial proportional credits.

NEXT STEPS – ESTIMATING EMISSIONS REDUCTIONS

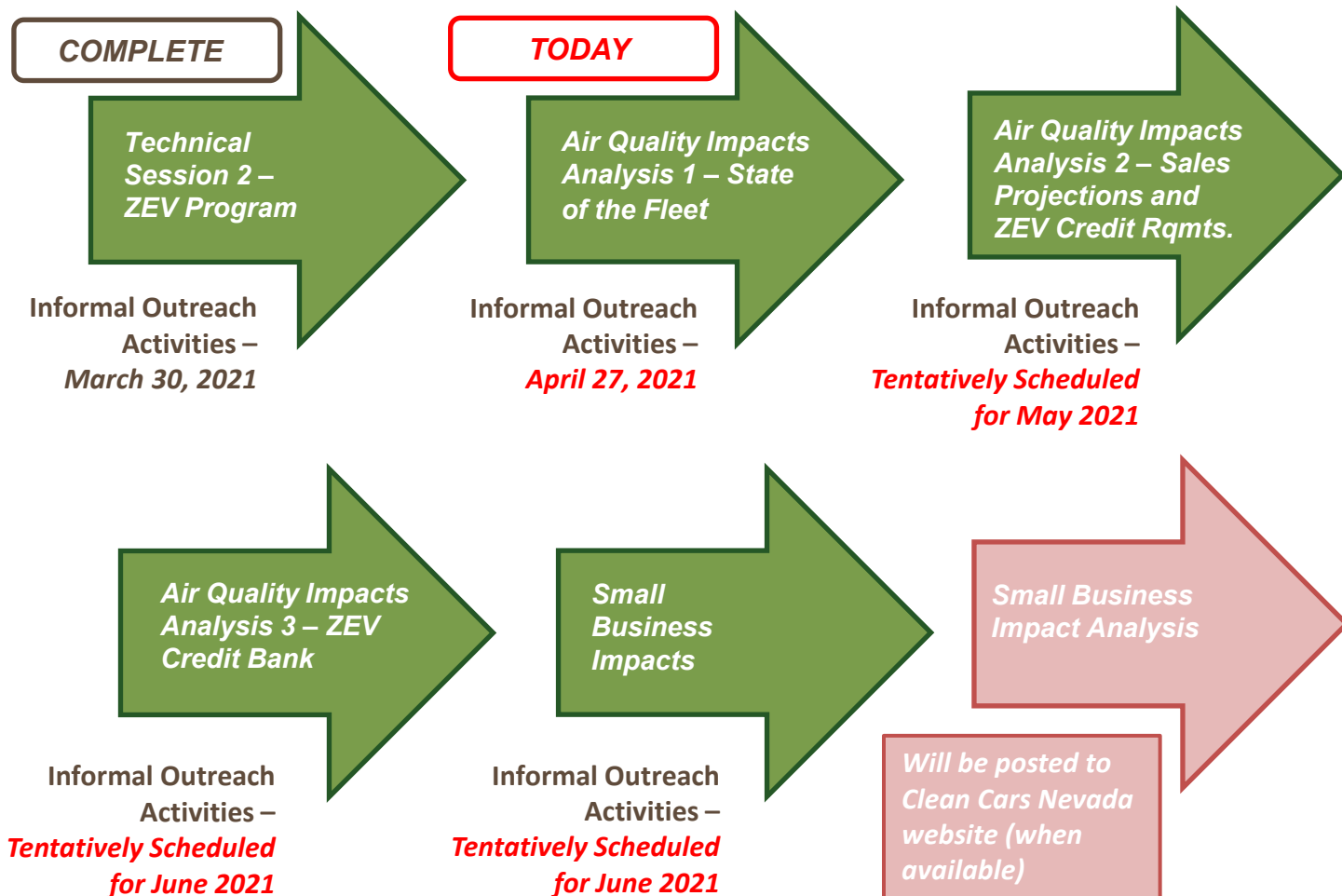
- Calculate emissions benefits of the Clean Cars Nevada LEV/ZEV Program and compare estimated emissions benefits with a business-as-usual reference case.
- NDEP will consider: 1) Tailpipe emissions, and 2) "Upstream emissions" from electric power generation used to charge EVs.
* * *
- The emissions reduction analysis will help policymakers assess the expected emission reductions from the Clean Cars Nevada program and how the program can assist in achieving statewide climate goals.

THE REGULATORY PROCESS AND OPPORTUNITIES FOR PUBLIC INPUT AND PARTICIPATION



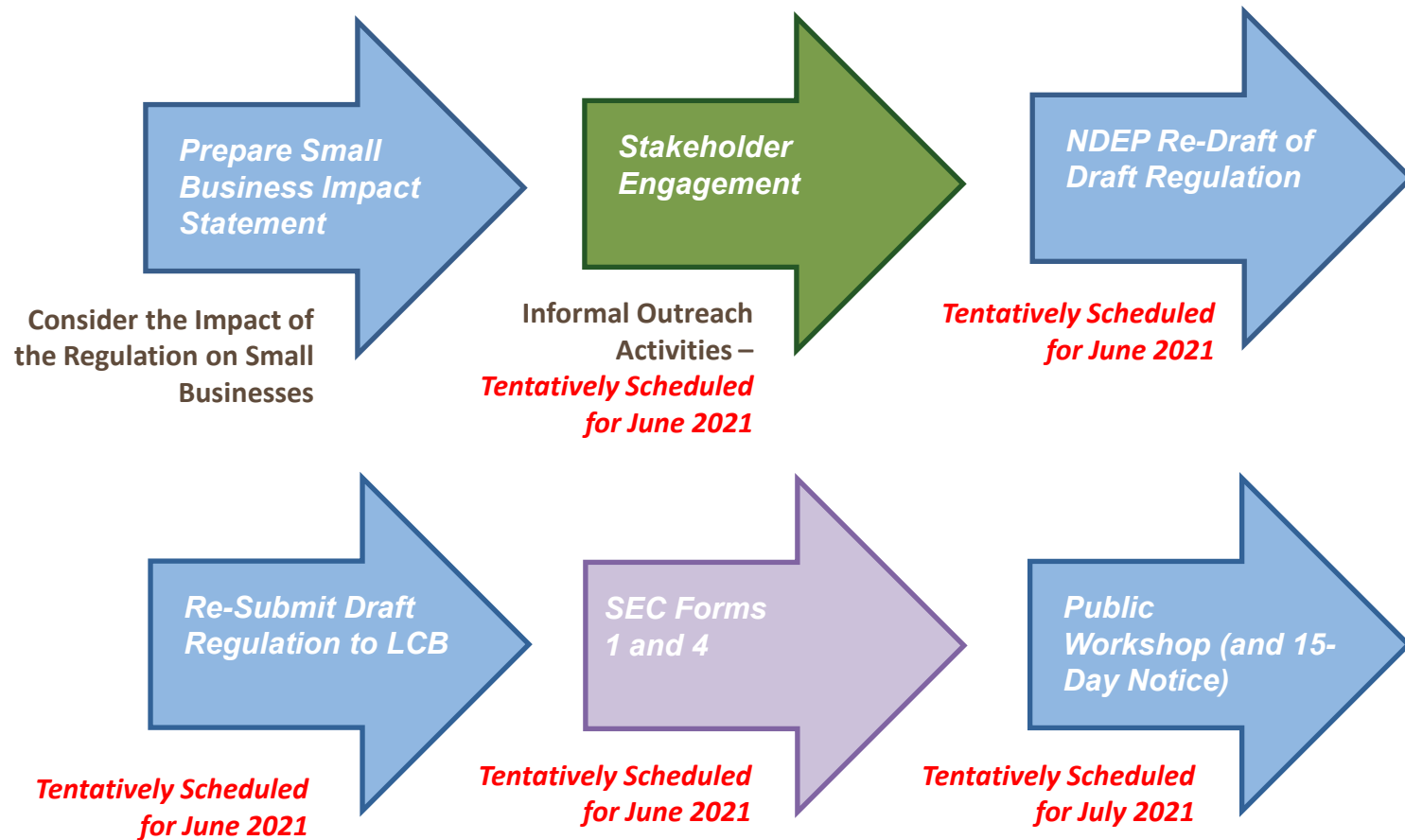
Note: **BLUE** = Regulatory Step; **GREEN** = Informal Activity; and **RED** = Data/Analysis Step

THE REGULATORY PROCESS AND OPPORTUNITIES FOR PUBLIC INPUT AND PARTICIPATION (CONTINUED)



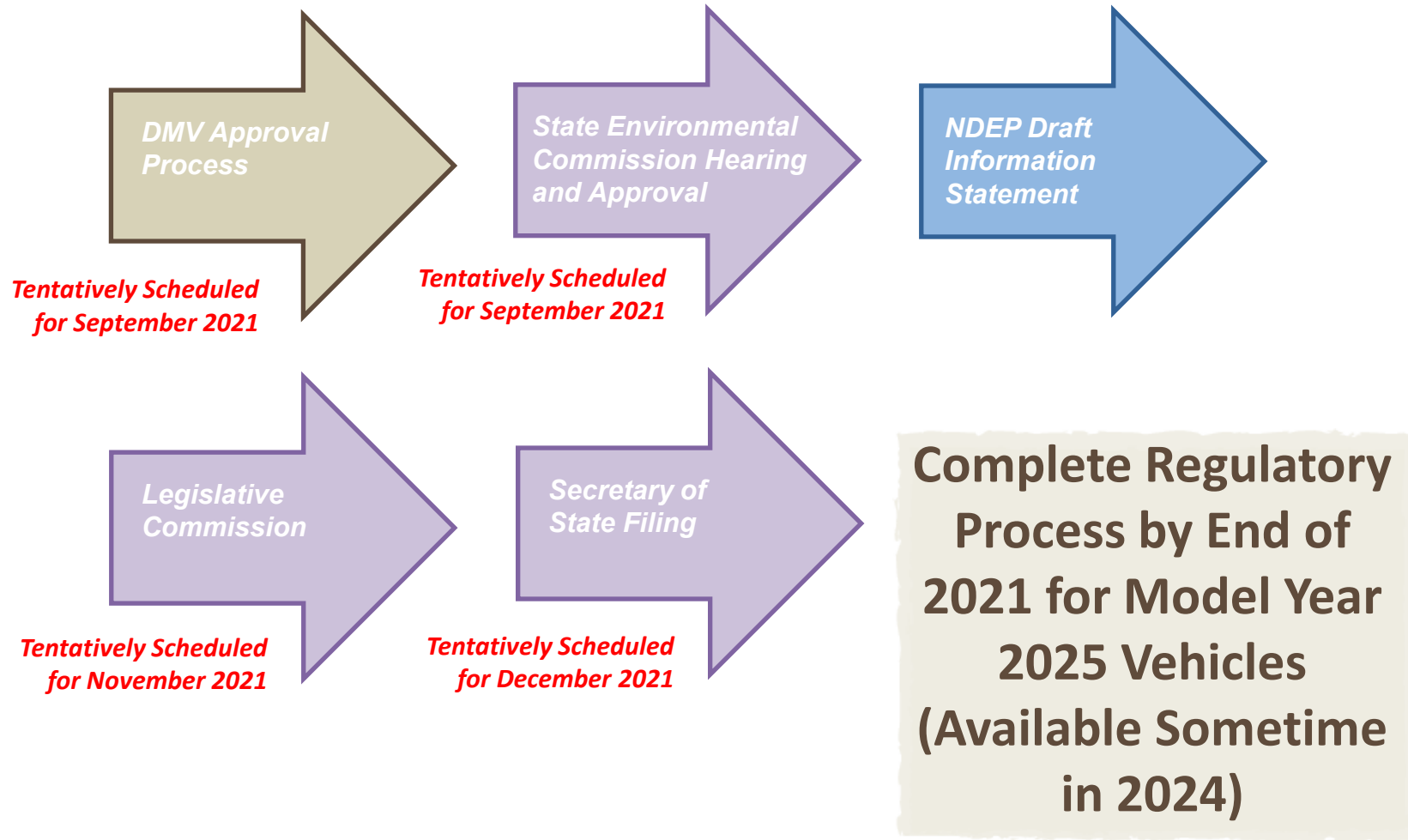
Note: GREEN = Informal Activity and RED = Data/Analysis Step

THE REGULATORY PROCESS AND OPPORTUNITIES FOR PUBLIC INPUT AND PARTICIPATION (CONTINUED)



Note: BLUE = Regulatory Step; GREEN = Informal Activity; and PURPLE = Approval Process

THE REGULATORY PROCESS AND OPPORTUNITIES FOR PUBLIC INPUT AND PARTICIPATION (CONTINUED)



WHERE TO FIND OUT MORE



Visit NDEP Clean Cars Website for updates
<http://ndep.nv.gov/air/clean-cars-nevada>



E-mail at CleanCarsNevada@ndep.nv.gov



Sign up for Clean Cars Nevada listserv on NDEP Website

 Join a program-specific email list to follow NDEP's regulatory actions and public notices

GET NOTICES 

Select a topic below for program-specific news and updates.

Board for Financing Water Projects

VW Settlement - Nevada Mitigation Fund

Nevada Recycling Program

Nevada Brownfields Program

Air Quality Info and Notices

Nevada Federal DOE Facility Oversight

Environmental Outreach & Education

Clean Cars Nevada

NDEP is posting all public comments received by email or letter on-line

<https://documentviewerpublic.ndep.nv.gov>

An account is required to access the comments, but it can be created right away by signing up.

Once signed in, select the category 'Public Comments For Clean Cars Nevada'

You can then search for public comments by name, organization and submission date



NDEP will be hosting Air Quality Impacts Analysis 2 - Sales Projections and ZEV Credit Requirements

Tentatively Scheduled for
May 2021

More details to follow.

Contact



Visit NDEP Clean Cars Website for updates
<http://ndep.nv.gov/air/clean-cars-nevada>



E-mail at CleanCarsNevada@ndep.nv.gov



Sign up for Clean Cars Nevada listserv on
NDEP Website