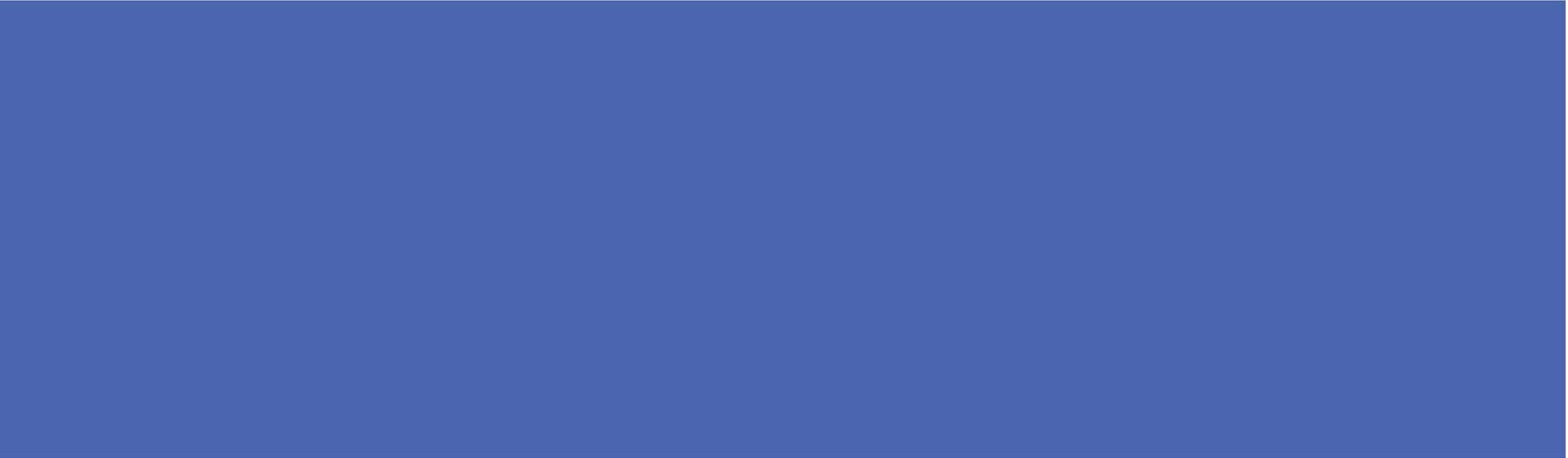

WAREHOUSE ISR WORKING GROUP

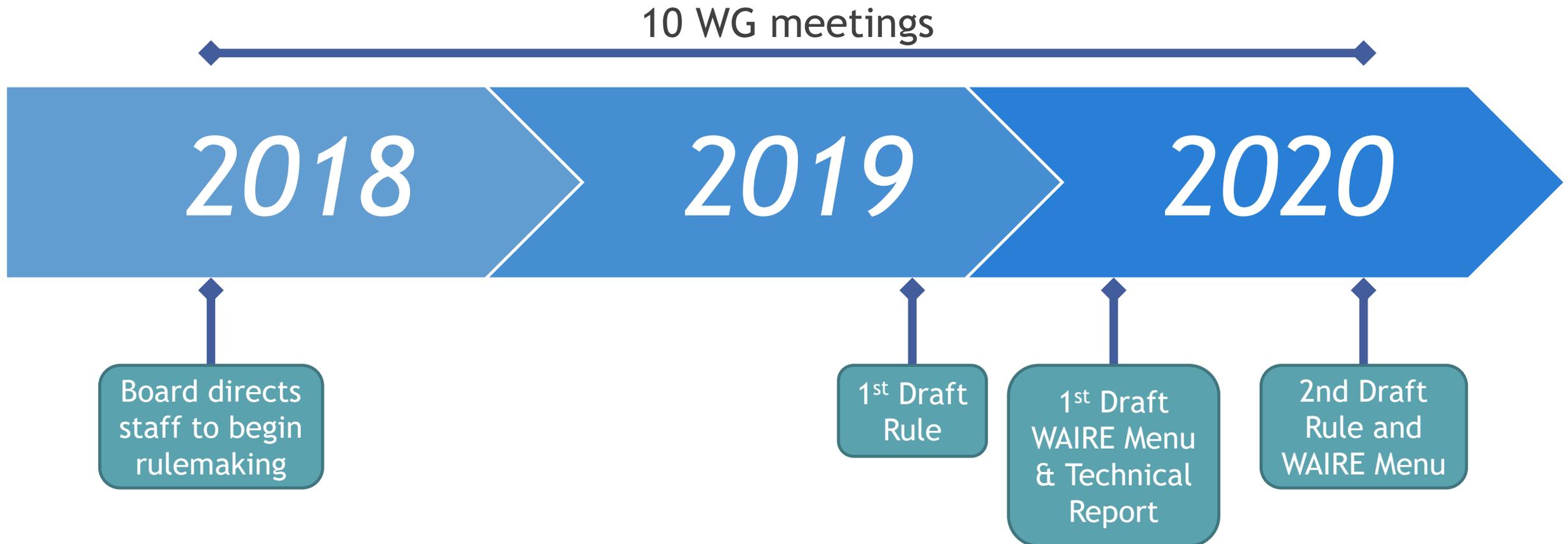
10/9/2020



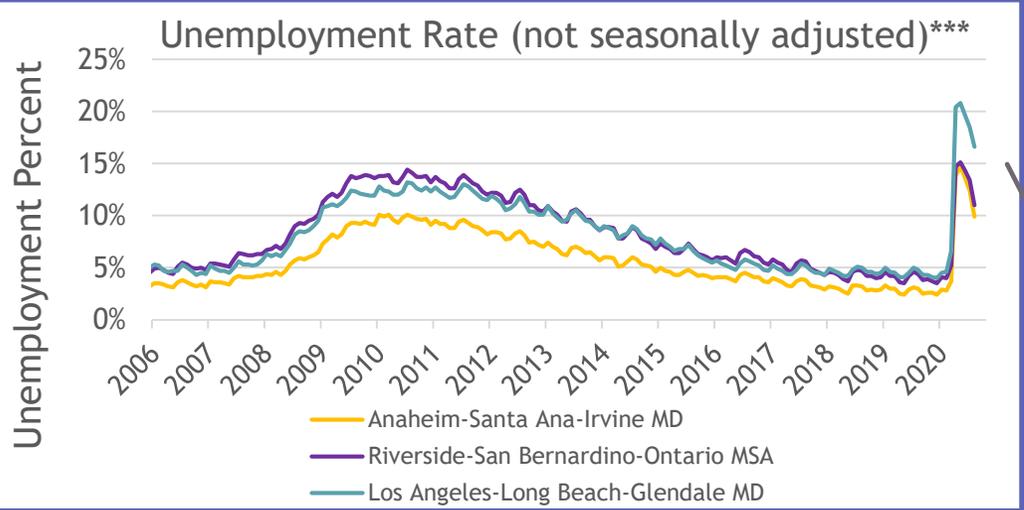
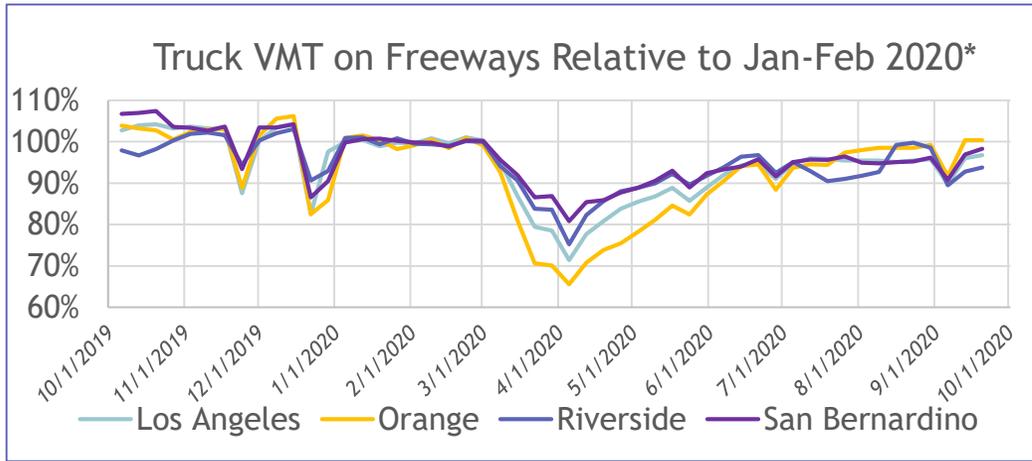
AGENDA

- Background
- Proposed updates to rule
- Potential outcomes of rule
- Next Steps

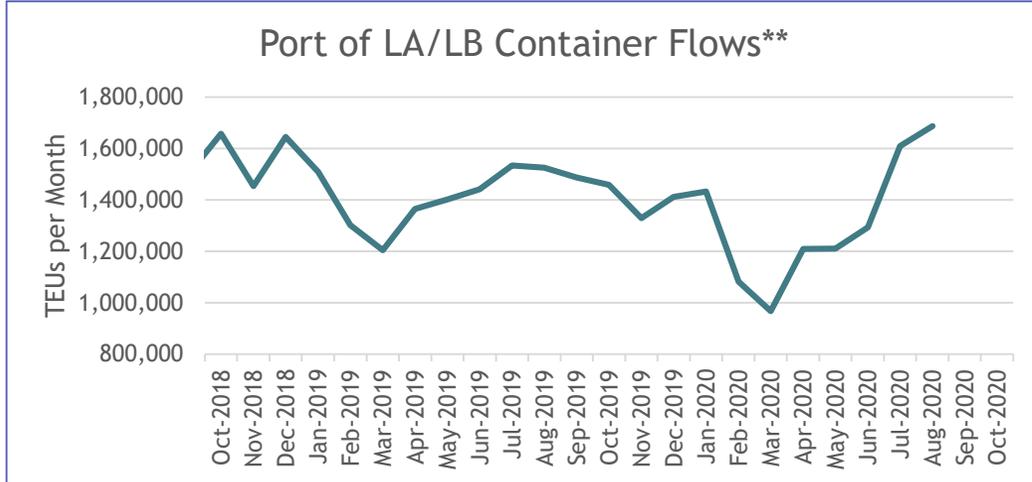
BACKGROUND - ISR RULEMAKING PROCESS TO DATE



IMPACT OF COVID-19 ON THE ECONOMY & LOGISTICS



Hardest hit are face-to-face industries like tourism and retail stores

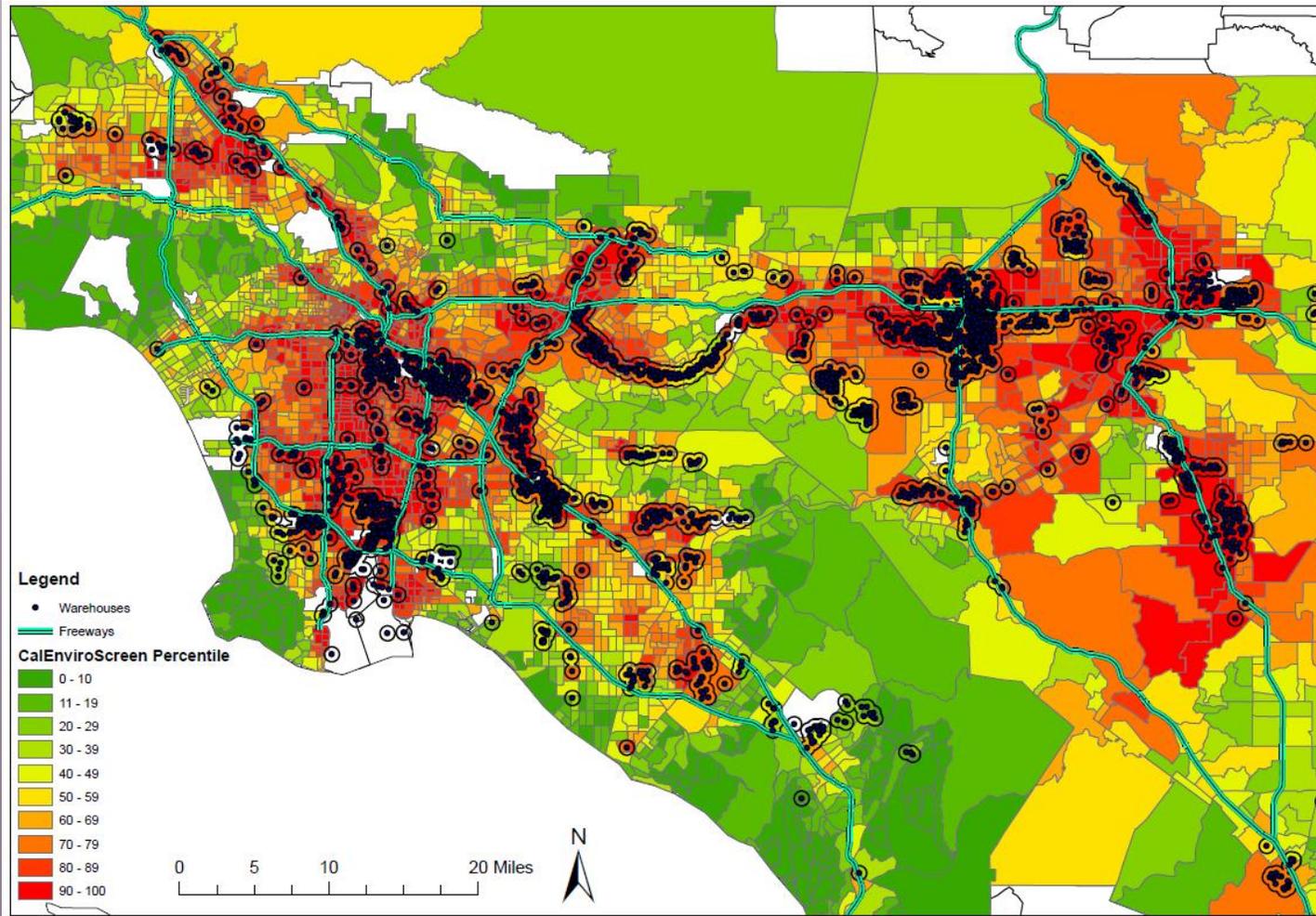


*In September, ocean shipping spot rates from Shanghai-LA tripled since March to reach all-time high*****

*In 3rd quarter, industrial vacancy rates in 4-county region remain <4% and lease rates are rising******

* www.pems.dot.ca.gov, ** www.polb.com, www.portoflosangeles.org, *** <https://www.labormarketinfo.edd.ca.gov>
 **** <https://ajot.com/news/u.s-home-shopping-boom-buoys-shipping-lines-half-a-world-away>, ***** www.costar.com

ENVIRONMENTAL BURDEN ON COMMUNITIES NEAR WAREHOUSES



CalEnviroScreen
Percentile

(population-weighted average)

South Coast AQMD

61st

Communities <0.5 mi.
of a warehouse

80th

KEY CARB ACTIONS IN 2020 TO REDUCE NO_x

➤ Advanced Clean Trucks

- ZE mandate on vehicle manufacturers for truck sales, phase-in starts in 2024
- NO_x reductions: 2023→ 0 tpd, 2031→ ~2.4 tpd
- Advanced Clean Fleets rulemaking initiated

➤ Low NO_x Omnibus

- Lower emission standard for all engines starting in 2024, and tightening in 2027
- Updated certification and warranty requirements
- NO_x reductions: 2023→ 0 tpd, 2031→ ~7 tpd

➤ At-Berth

- Expands the requirements for vessels to reduce their at-berth emissions
- NO_x reductions: 2023→ ~4.9 tpd, 2031→ ~3.6 tpd

- 2016 AQMP total NO_x reductions needed beyond existing requirements:
 - 2023→ 135 tpd
 - 2031→ 142 tpd

ADDITIONAL NOTABLE STATE ACTIVITIES IN 2020

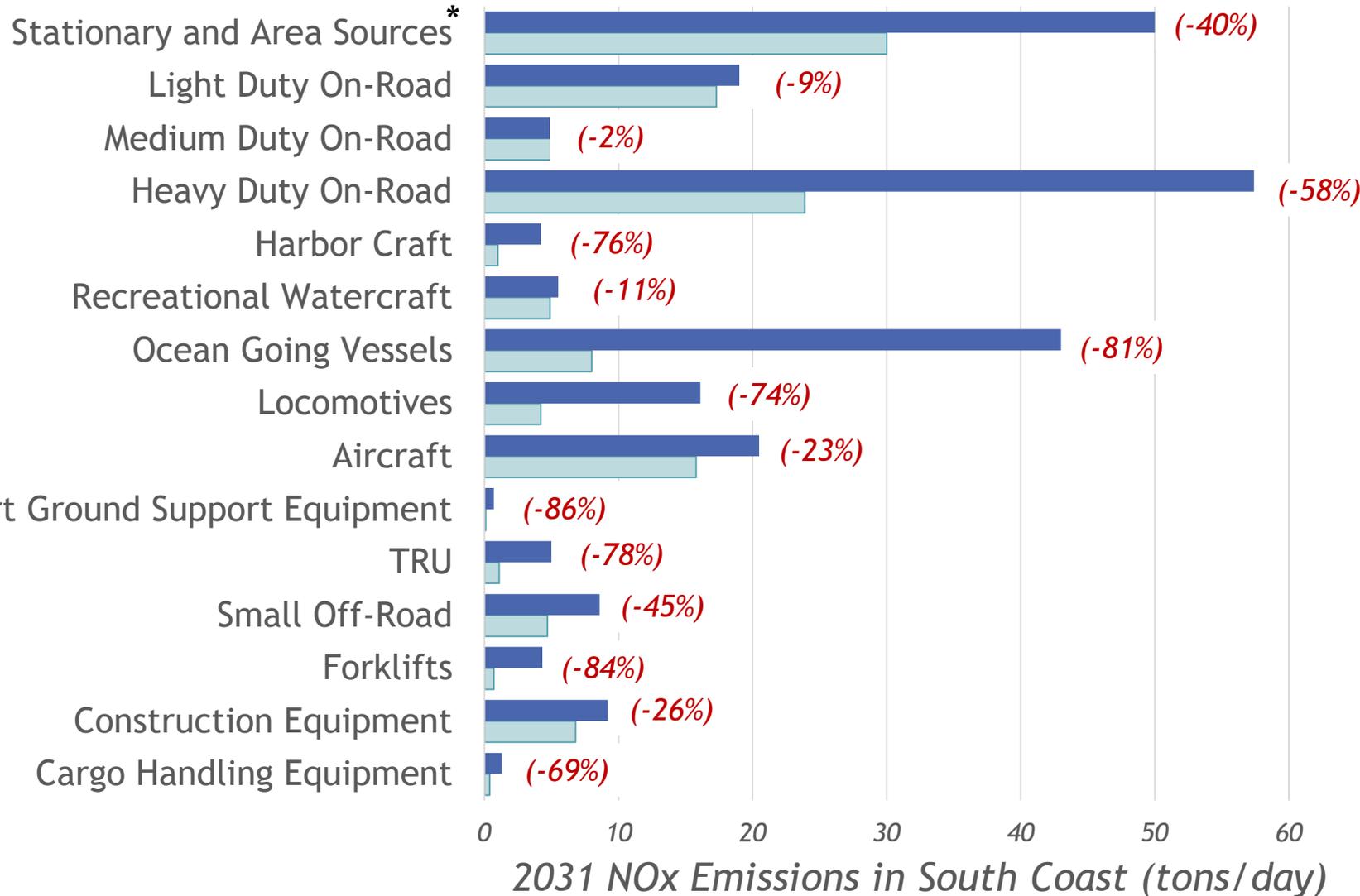
- Governor's executive order (N-79-20) set new goals*
 - 100% ZE on-road sales by 2035
 - 100% HD on-road fleet by 2045 (drayage 100% ZE by 2035)
 - 100% ZE off-road fleet by 2035
- Public Utilities Commission
 - Transportation Electrification Framework development
 - 'Rule 18' revision** (makes it easier for 3rd parties to resell electricity for MD-HD and off-road vehicles)
- Energy Commission
 - AB 2127 Vehicle Charging Infrastructure draft analysis***
 - ~40,000 Class 3-8 trucks in 2030 requires ~24,000 50kW chargers and ~3,300 350 kW chargers

* <https://www.gov.ca.gov/wp-content/uploads/2020/09/9.23.20-EO-N-79-20-text.pdf>

** <https://docs.cpuc.ca.gov/SearchRes.aspx?docformat=ALL&docid=347622058>

*** <https://efiling.energy.ca.gov/getdocument.aspx?tn=234209>

CARB Draft Mobile Source Strategy (Oct. 2020)



Key Takeaways

- Ozone standards
- Scenario does not address meeting 2023 standard
- Staff still evaluating whether scenario presented will meet 2031 standard
- Some categories are more difficult to achieve projected reductions
- Other categories with opportunities for reductions will need to make up shortfall
- ISR is one potential opportunity

*From 2016 AQMP

NEED FOR WAREHOUSE ISR

- Region continues to have worst air quality in the nation (except during some wildfires)
- Existing regulations are not sufficient to meet 2023 or 2031 ozone standards
 - Proposed state regulations also will not meet 2023 standard and are unlikely to achieve 2031 standard
- Sufficient incentive funding has not yet been identified to achieve necessary emissions reductions
- Communities near warehouses experience higher environmental burden
- State's goals for ZE MD-HD vehicles requires actions beyond what CARB can require on its own

OVERVIEW OF PROPOSED WAREHOUSE ISR REQUIREMENTS

Requirements

Applicability

- Owners and operators of warehouses $\geq 100,000$ sf
- Owners are only subject to reporting, but they can voluntarily earn points
- Operators only leasing $< 50,000$ sf for warehousing activities, are just subject to limited reporting **New*

Earn WAIRE Points Annually

WAIRE Menu

Mitigation Fee

Custom WAIRE Plan

**New
Option*

Limited transferring/banking
with early or over-compliance

Reporting

Warehouse Operations Notification

Initial Site Information Report

Annual WAIRE Report

UPDATES TO PROPOSED DRAFT RULE

- Custom Plan option to earn Points added [(d)(4)]
- Reference to WAIRE Implementation Guidelines added [(f) and throughout the rule]
- Option to earn Points earlier than first compliance year added [(d)(6)(B)(iii)]
- Class 2b-3 trucks added [(d)(B), (e)(2)(B)(iii), and Menu]
- Limited exemptions added
 - 50,000 sq. ft. lower threshold for operators in a multi-tenant warehouse [(g)(1)]
 - Reduced reporting and no Points requirements
 - Unforeseen Circumstance (e.g., malfunctioning equipment) [(g)(2)]
- TRUs and solar added to the WAIRE Menu [Table 3]
 - Stationary battery storage removed from Menu (but can be included in Custom Plan)
- Mitigation fee escalation for use in consecutive years removed
- Re-ordering of some sections and clarifying text added

CUSTOM WAIRE PLAN

- Option added to provide additional flexibility for warehouse operators to take actions to reduce emissions or to facilitate emission reductions
 - Can be used for actions that do not readily have default characteristics that would align with a menu-based approach
- Potential examples:
 - Off-site ZE charging/fueling infrastructure installations (including those funded by multiple operators)
 - Cold storage facilities modifying their building's energy use to reduce emissions from the electrical grid
 - Operators who own a fleet of TRUs that demonstrate overcompliance with CARB's proposed TRU regulation (if the regulation is approved)
 - Other projects also possible

CUSTOM WAIRE PLAN MUST MEET STRICT CRITERIA

- Method for determining WAIRE Points earned will be included in WAIRE Program Implementation Guidelines and will be aligned with methods in draft WAIRE Menu Technical Report
 - NOx reductions, Diesel PM reductions, Incremental cost
- Regional and local emission reductions must be quantifiable, verifiable, and real
 - Any Plan relying on emission reductions based on vehicle miles travelled (VMT) reductions must demonstrate that the reduced VMT is surplus to the most recent Regional Transportation Plan and AQMP
- Emission reductions must be achieved within three years after plan approval

CUSTOM WAIRE PLAN APPLICATION TIMELINE

• ≥ 9 months before anticipated use of Points from Plan, operator submits Plan application

• ≤ 30 days after receipt, EO conducts initial review and confirms receipt

• ≥ 30 days before approval, Plan Application posted online and available for public comment

• ≤ 3 months after receipt, EO approves or rejects Plan

• ≤ 30 days after rejection, operator may resubmit corrected Plan

• ≤ 30 days after receipt, EO approves or rejects Plan for current compliance period

• Before Annual WAIRE Report due, operator either implements approved Plan or earns WAIRE Points from Menu or mitigation fee



CUSTOM WAIRE PLAN APPLICATION ELEMENTS

- Description of how proposed action will achieve emission reductions as quickly as feasible and ≤ 3 years after Plan approval
 - Actions that don't directly result in emission reductions can still earn Points (e.g., installing offsite charging infrastructure)
- Quantification of NO_x or Diesel PM emission reductions in the South Coast AQMD and within three miles of the warehouse
- Description of method to verify emission reductions
- Description of any permits or approvals needed to complete Plan
- Schedule of key milestones to complete the action
 - Multi-year Plans require semi-annual progress reports
 - EO may rescind approval of Plan if insufficient progress being made

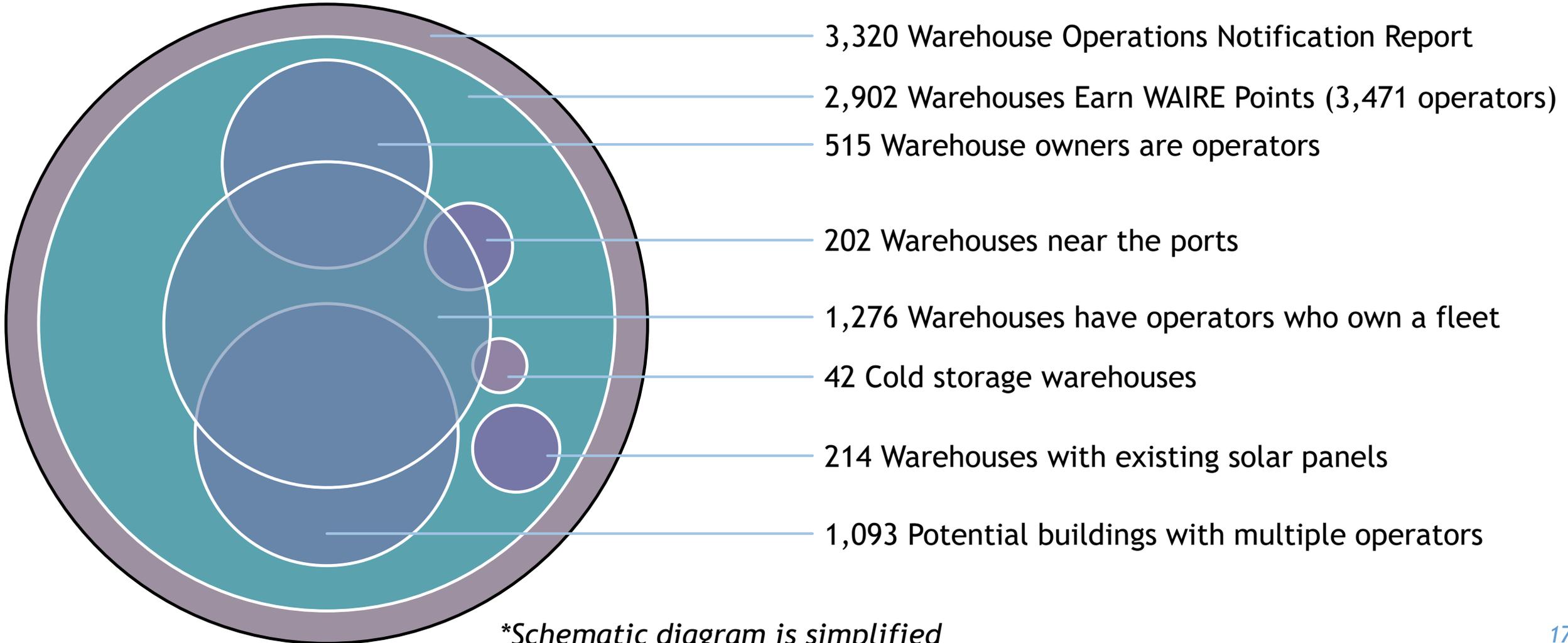
ANALYSIS OF POTENTIAL UNIVERSE OF WAREHOUSES SUBJECT TO RULE

- Multiple databases evaluated
 - Costar, Dun & Bradstreet, InfoUsa, GoogleEarth, Fleetseek, Leonard's List, Powersys, South Coast AQMD internal data
- 'Snapshot' of universe presented for rule analysis purposes
 - Universe expected to change routinely as new operators move into and out of buildings, operations change, new warehouses constructed, etc.
- Reporting required by proposed rule will provide more definitive information about warehouse operations

Key Characteristics Evaluated

- Building size
- Amount of office space
- Warehouse operators
- Operator fleets
- Cold storage warehouses
- Warehouse locations
- Solar installations
- Operator yard trucks

SNAPSHOT ANALYSIS OF UNIVERSE OF WAREHOUSES* SUBJECT TO WAREHOUSE ISR



POTENTIAL OUTCOMES OF WAREHOUSE ISR

- Range of potential stringency being analyzed
 - 0.0001 to 0.005 Points per Weighted Annual Truck Trip
- PR 2305 will include two phase-in schedules
 - Size of warehouse determines when Points must first be earned
 - Stringency of rule will phase in through time

Example Stringency Schedule

	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>
<u>Whses >250k sf</u>	0.0001	0.0002	0.0003	0.0003	0.0003
<u>Whses >150k sf - 250k sf</u>		0.0001	0.0002	0.0003	0.0003
<u>Whses >100k sf - 150k sf</u>			0.0001	0.0002	0.0003

NEXT STEPS

- CEQA - NOP release anticipated in October
 - Scoping meeting date not yet determined
- Next working group meeting this fall to discuss proposed stringency of rule
- Virtual community meetings tentatively scheduled for Jan. 13 and 14
- Anticipate Board hearing to consider rule in March 2021