CALIFORNIA
AIR RESOURCES BOARD

Interstate Transport State Implementation Plan (Transport SIP) Amendment

April 17, 2024 Workshop

Background

Interstate Air Pollution

- Air pollution generated in one state (upwind) and then blown by wind to another state (downwind)

Clean Air Act Requirements

- States must address interstate air pollution that affects downwind states' ability to attain and maintain the National Ambient Air Quality Standards
- Each state must submit a plan to address emissions that will contribute significantly to nonattainment of a standard, or interfere with maintenance of a standard, in a downwind state.

California's Interstate Transport SIP for 2015 Ozone Standard

- CARB submitted the California Interstate Transport SIP for the 2015 Ozone standard in 2018 to address interstate transport of emissions
- EPA finalized the disapproval of the Transport SIP for 19 states including California on February 13, 2023, and published the final transport Federal Implementation Plan (FIP) on June 5, 2023.
- Interstate Transport SIP Amendment seeks to replace the disapproved California Interstate Transport SIP and resolve the FIP.

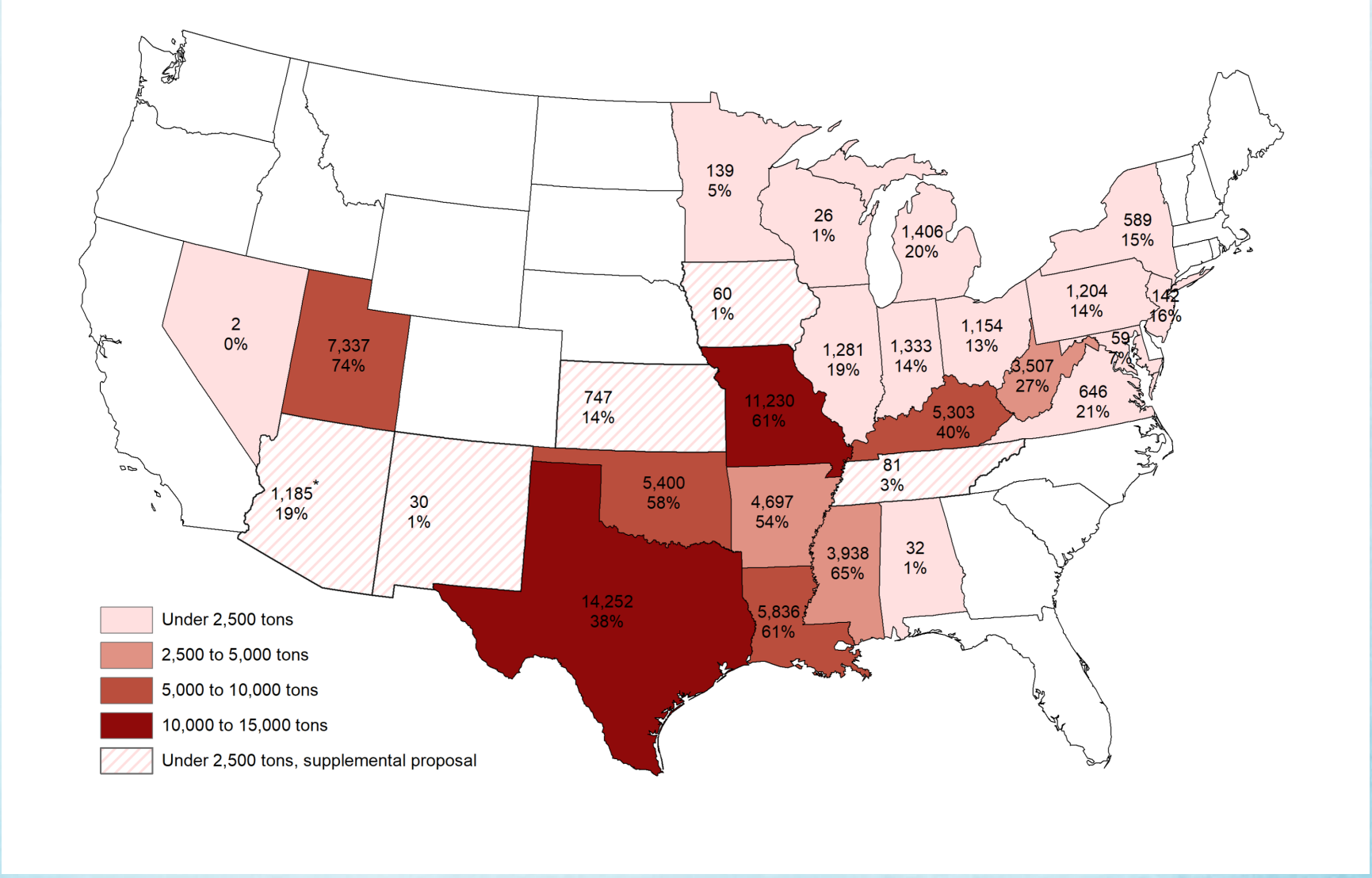
What is a Federal Implementation Plan?

- EPA prepares a FIP if a SIP does not meet all the necessary requirements if the state does not resolve issues with the SIP in a timely manner, or if no SIP was submitted
- EPA has up to 2 years to publish a FIP after a disapproval, but in this case proposed the FIP before the disapproval of the California's interstate transport SIP
- FIP can be replaced by an approvable SIP

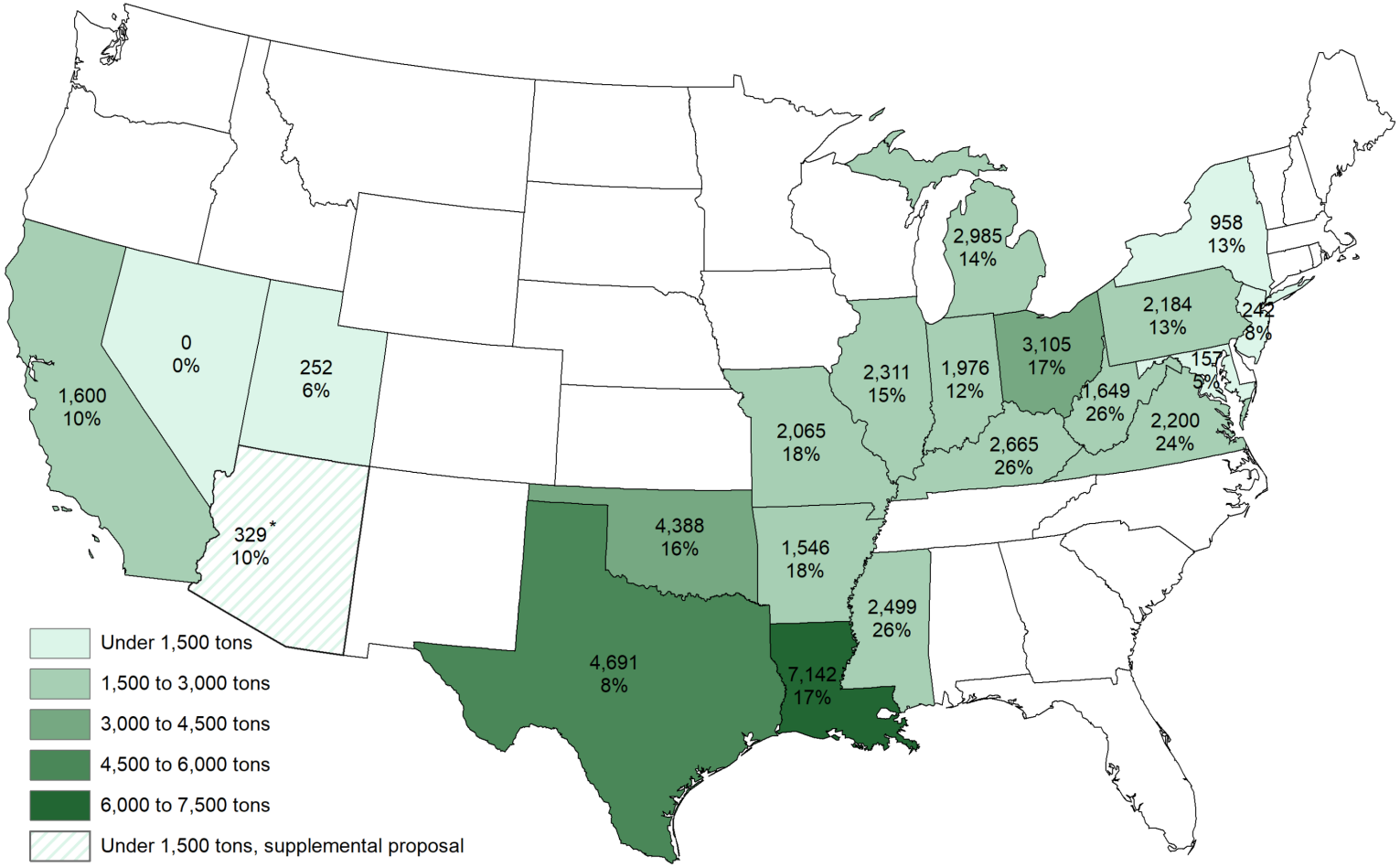
EPA National Transport FIP

- EPA analyzed emission data to determine the most effective way to address downwind emission impacts from upwind states
- EPA determined that a number of states had the ability to add controls to large EGU emission sources
- EPA also determined that a number of states had the ability to add controls on large Non-EGU emission sources
- California has EGU sources largely controlled to the extent practicable and so the FIP only focuses on Non-EGU emission sources in California
- On January 16, 2024, EPA proposed Supplemental Rulemaking to add five more states to the FIP

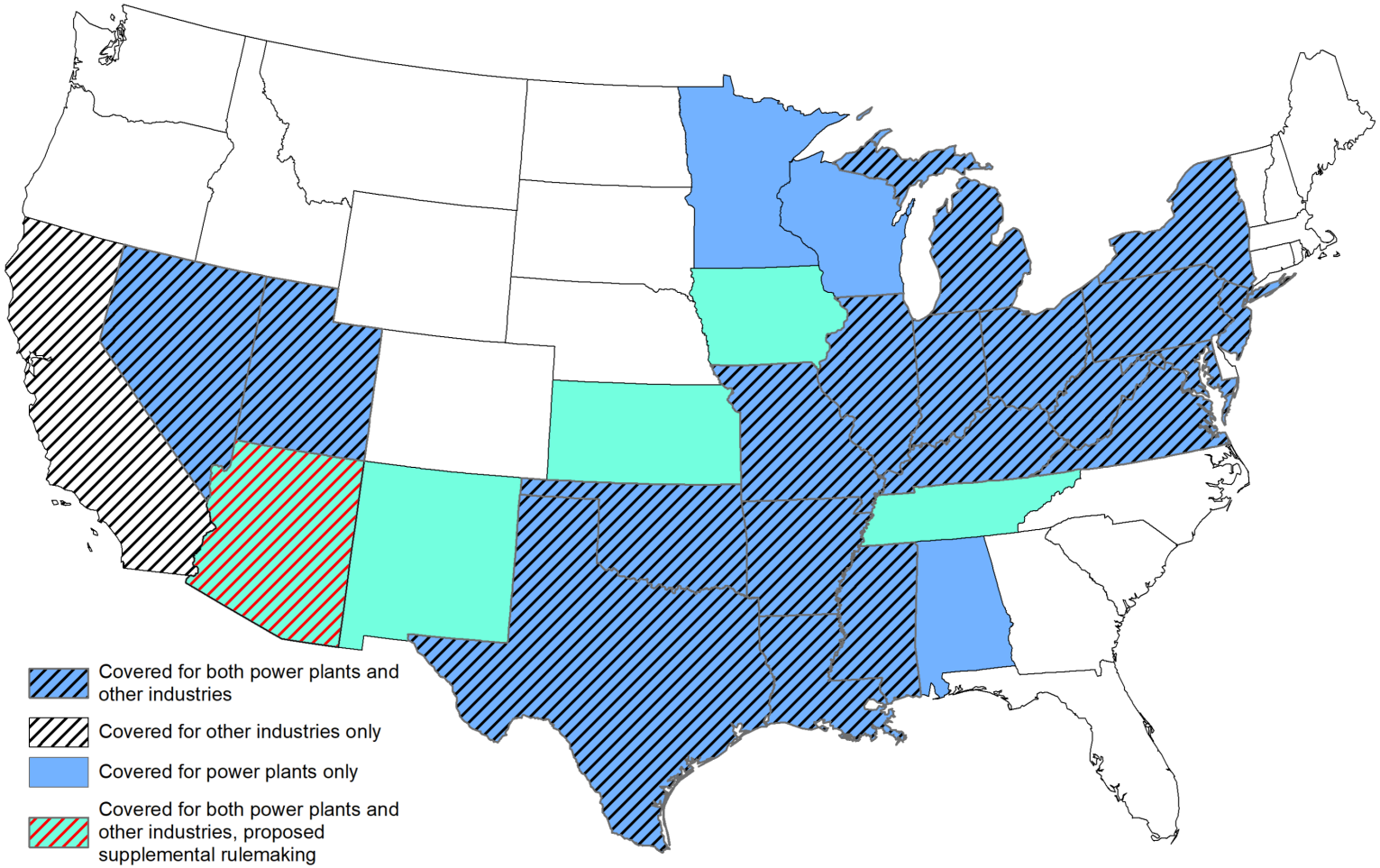
Power Plant (EGU) Ozone Season NOx Emissions Reductions Under the FIP and the Proposed Supplemental Rulemaking



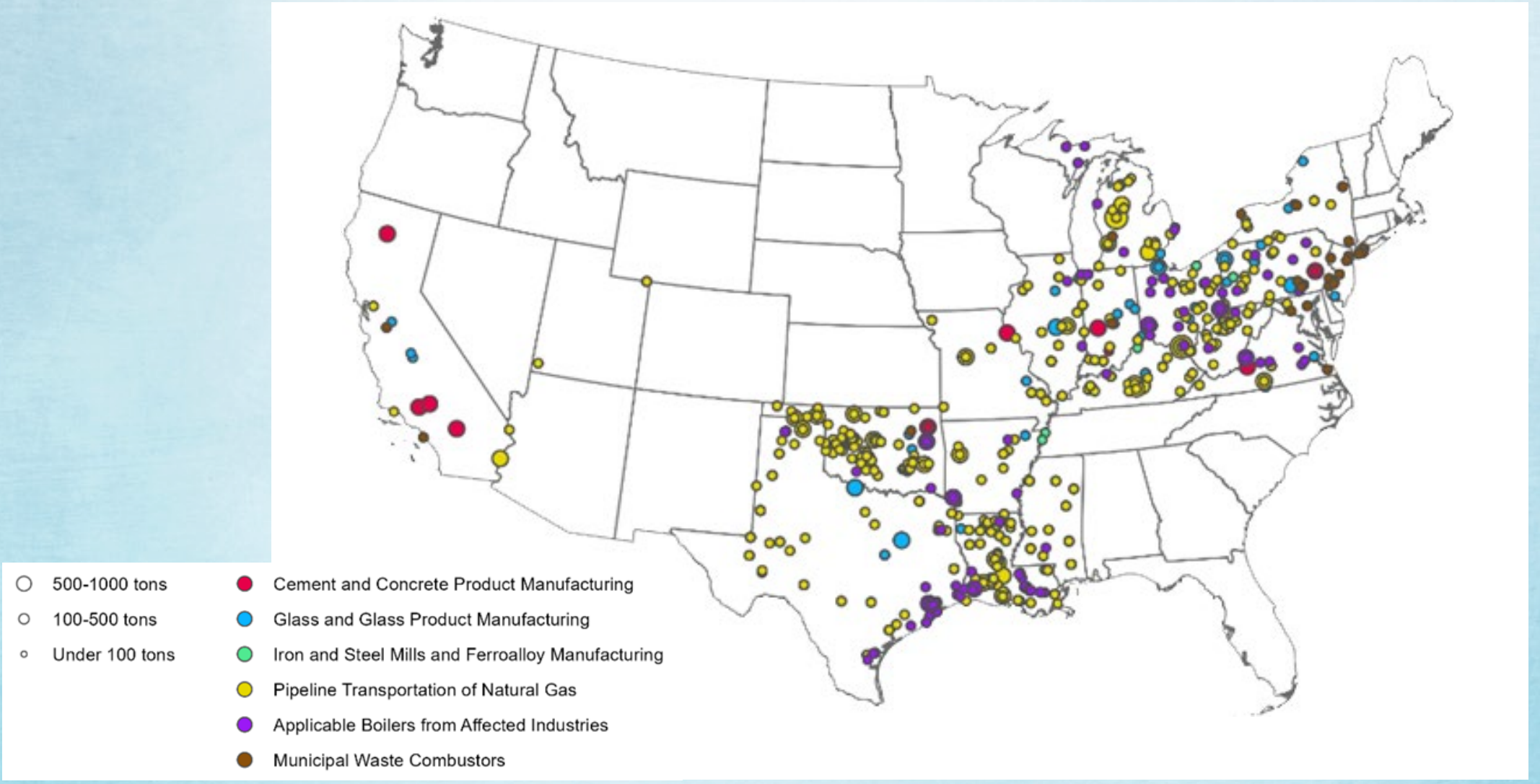
Industrial Source (Non-EGU) Ozone Season NOx Emissions Reductions Under the FIP and the Proposed Supplemental Rulemaking



States Covered Under the Final FIP and the Proposed Supplemental Rulemaking



Non-EGU Ozone Season NOx Reductions*



State	Total
LA	7,142
TX	4,691
OK	4,388
OH	3,105
MI	2,985
KY	2,665
MS	2,499
IL	2,311
VA	2,200
PA	2,184
MO	2,065
IN	1,976
WV	1,649
CA	1,600
AR	1,546
NY	958
UT	252
NJ	242
MD	157

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*** Sources in the Proposed Supplemental Rulemaking are not included on this map**

Categories Covered by the Transport FIP in California and EPA Estimated Reductions

NAICS Description	Annual Reductions	Ozone Season Emissions Reductions	Average Cost/ Ton (2016$)
Cement and Concrete Product Manufacturing	2,725	1,135	1,279
Glass and Glass Product Manufacturing	383	160	774
Pipeline Transportation of Natural Gas	512	213	4,718
Waste Treatment and Disposal	221	92	10,271
Total NOx Reductions	3,841	**1,600**	

FIP Timeline

June 5, 2023

Good Neighbor Plan FIP published in the Federal Register

August 5, 2023

FIP went into effect

December 4, 2023

Initial Notification

Cement and Concrete Product Manufacturing;

Iron and Steel Mills and Ferroalloy Manufacturing;

Glass and Glass Product Manufacturing

August 5, 2024

Work Plan

Iron and Steel Mills and Ferroalloy Manufacturing

Case-by-Case Emissions Limit Request

All sources

October 1, 2025, and every October thereafter

Facility-Wide Averaging Plan Request

Pipeline Transportation of Natural Gas

November 3, 2025

Compliance Extension Request

Initial Request

All sources

2026 ozone season

EPA enforces NOx emissions control requirements for industrial emissions sources

November 2, 2026

Compliance Extension Request

Second Request

All sources

https://www.epa.gov/stationary-sources-air-pollution/good-neighbor-plan-2015-ozone-naaqs-compliance-industrial-sources

CARB's 2024 Transport SIP

- Addresses EPA's Transport Framework
- Includes emission reductions that provide benefits for California's downwind neighbors from mobile sources
- Replaces EPA Transport FIP

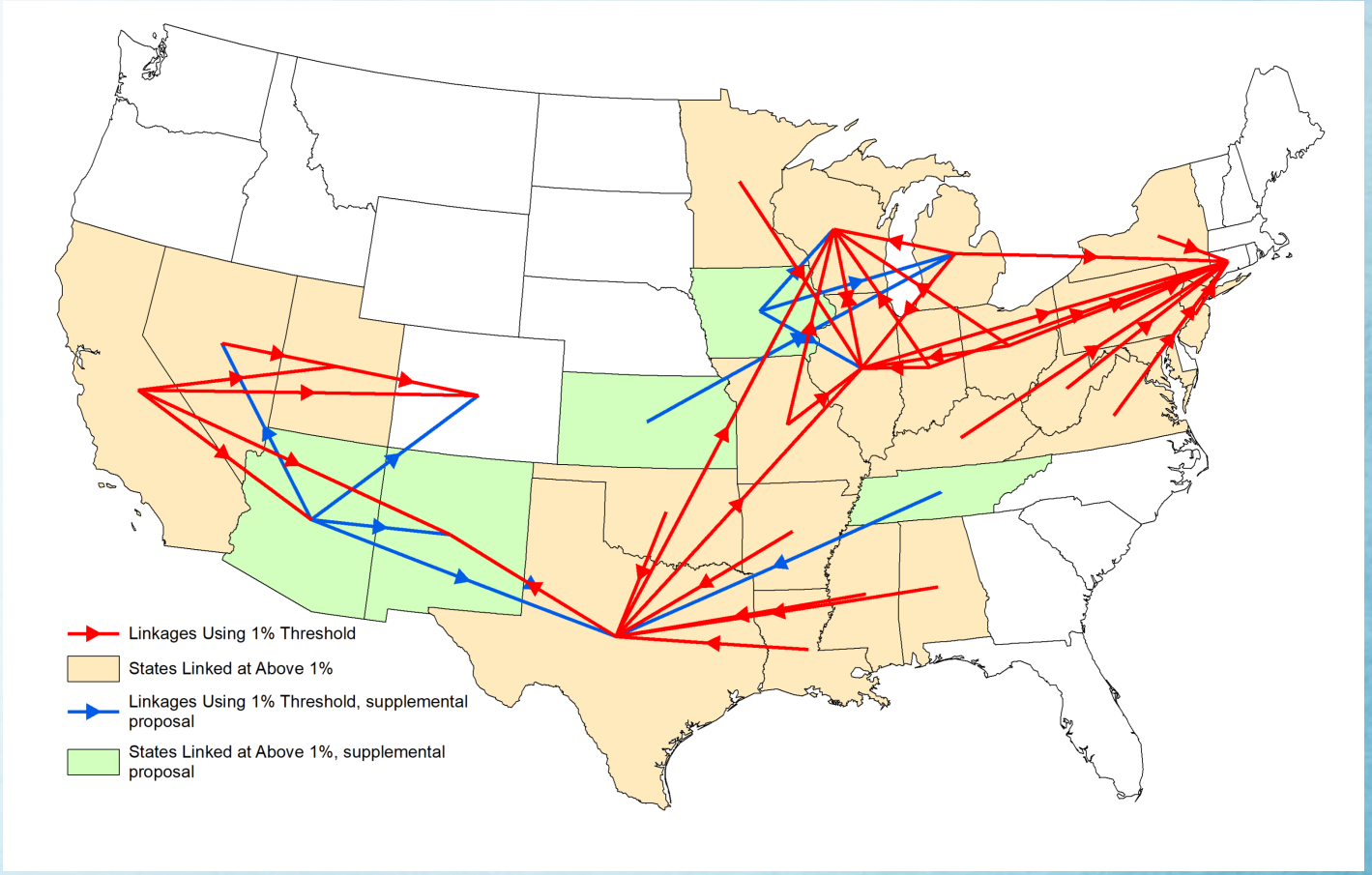
EPA's Four Step Interstate Transport Framework

1. **Identify downwind receptors** expected to have problems attaining or maintaining the NAAQS
2. **Determine which upwind states are "linked"** to these downwind air quality problems and thereby warrant further analysis of their emissions
3. **Identify upwind emissions** on a statewide basis that significantly contribute to nonattainment or interfere with maintenance of a standard in any area, considering cost-and air-quality-based factors
4. **Implement necessary emissions reductions** within the state to reduce contribution to downwind NAAQS nonattainment or maintenance areas

Identification of Downwind Receptors

EPA modeling shows California contributed more than 1% of the ozone standard or 0.70 ppb to downwind ozone nonattainment or maintenance areas in AZ, NV, CO, UT, and NM

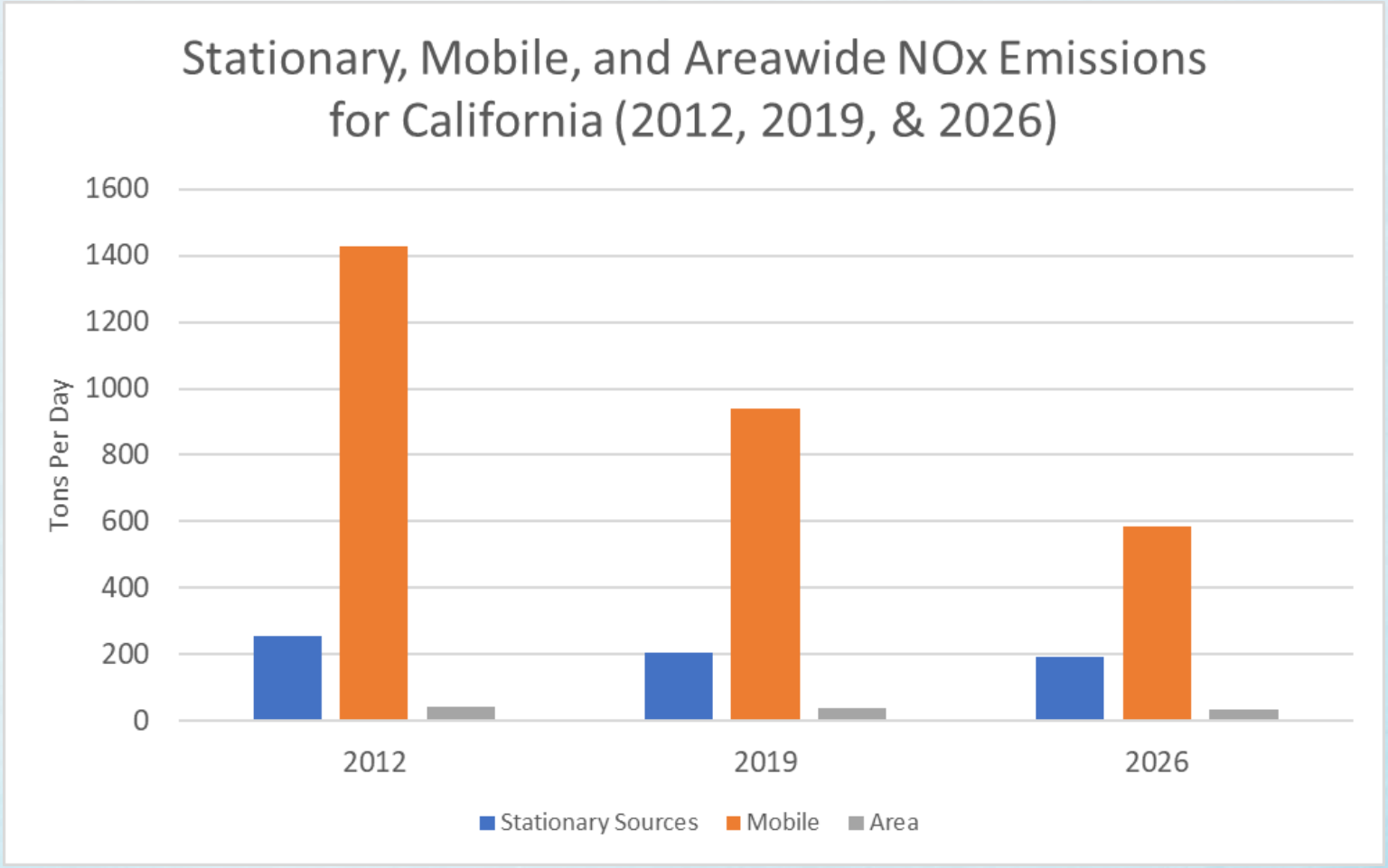
Transport Linkages Under the FIP and the Proposed Supplemental Rulemaking



CARB's Interstate Transport SIP Proposal

- Based on the FIP modeling results for Steps 1, 2, and 3.
  - Acknowledge California's contribution to ozone in downwind areas
  - 1600 tons/ozone season of NOx emission reductions by 2026
- Step 4 - Use new mobile source emission reductions from HD I&M to address the state's transport obligations
- Acknowledge stationary sources that already meet FIP emission reduction levels

Mobile Source NOx Emissions Dominate in California



CEPAM, 2022 Ozone SIP Ver 1.01 B with Adjustments, Summer, Base Year 2018

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Heavy-Duty Inspection and Maintenance (Clean Truck Check)

Program to test heavy-duty vehicle emissions for all diesel and alternative fuel vehicles starting in January 2023

- Applies to vehicles over 14,000 pounds gross vehicle weight that operate in California, including personal vehicles
- Projected to reduce NOx emissions by 68 tons per day as of the 2026 ozone season and by 81 tons per day in 2037 statewide
- Provides $76 billion in health benefits. 7,500 avoided premature deaths, and 6,000 avoided hospitalizations statewide

https://ww2.arb.ca.gov/our-work/programs/CTC

Clean Truck Check Timeline

High-emitter vehicle screening using PEAQS and Enforcement

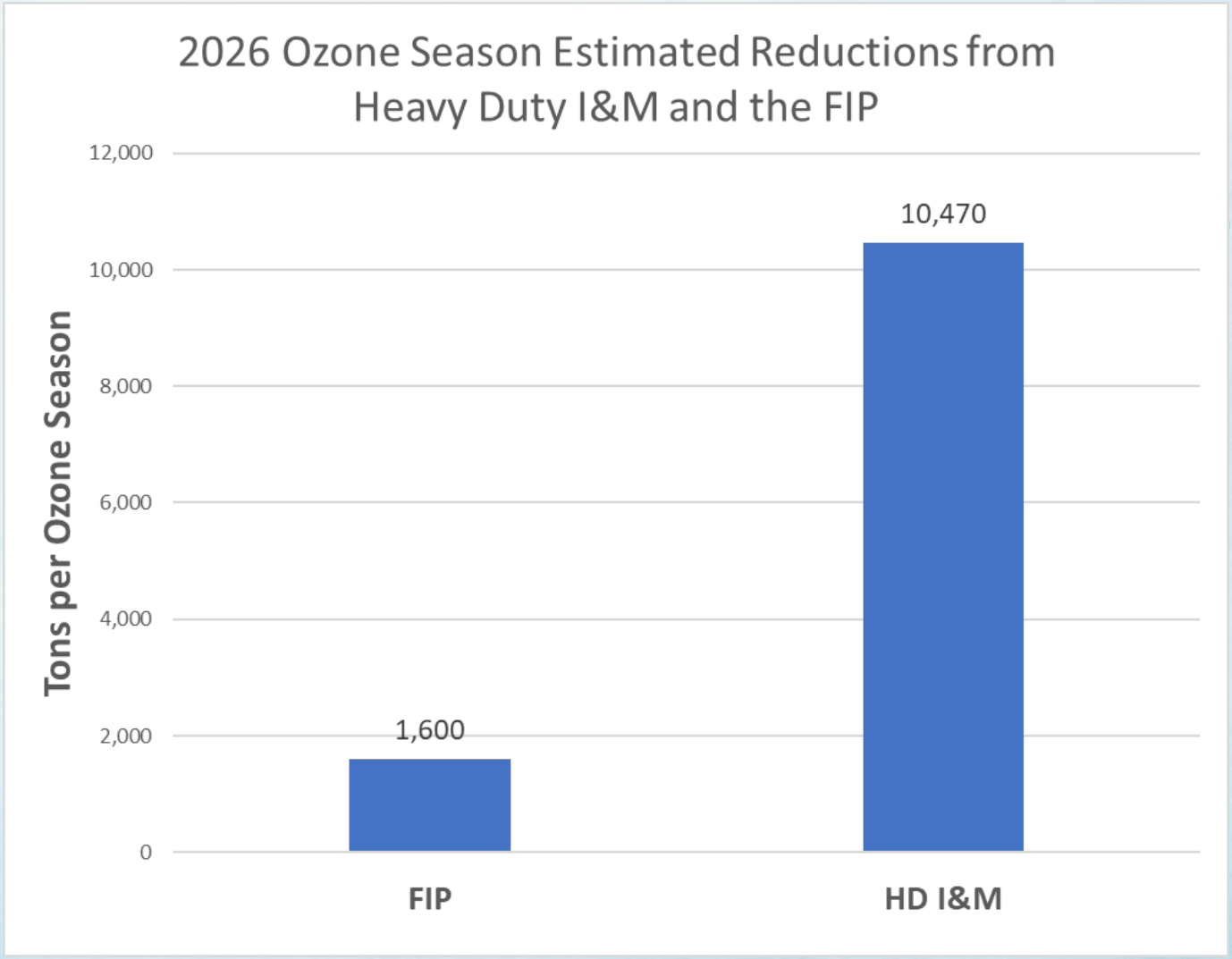
Periodic Compliance testing begins in Clean Truck Check

Phase 1: January 2023 | **Phase 2: Dec 31, 2023** | **Phase 3: Jan 1, 2025**

Open Reporting Season:
Oct-Dec 2023

- Owner/vehicle reporting
- Pay compliance fee
- Freight contractor and facility requirements start 1/1/24

Clean Truck Check Reductions Exceed FIP Reductions



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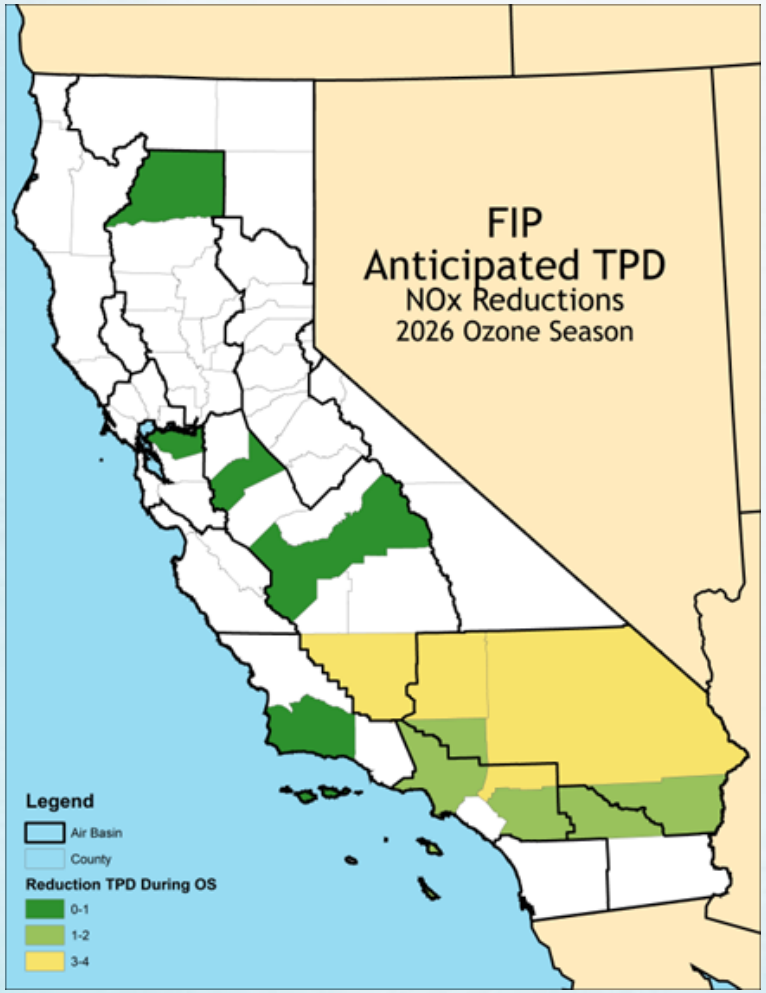
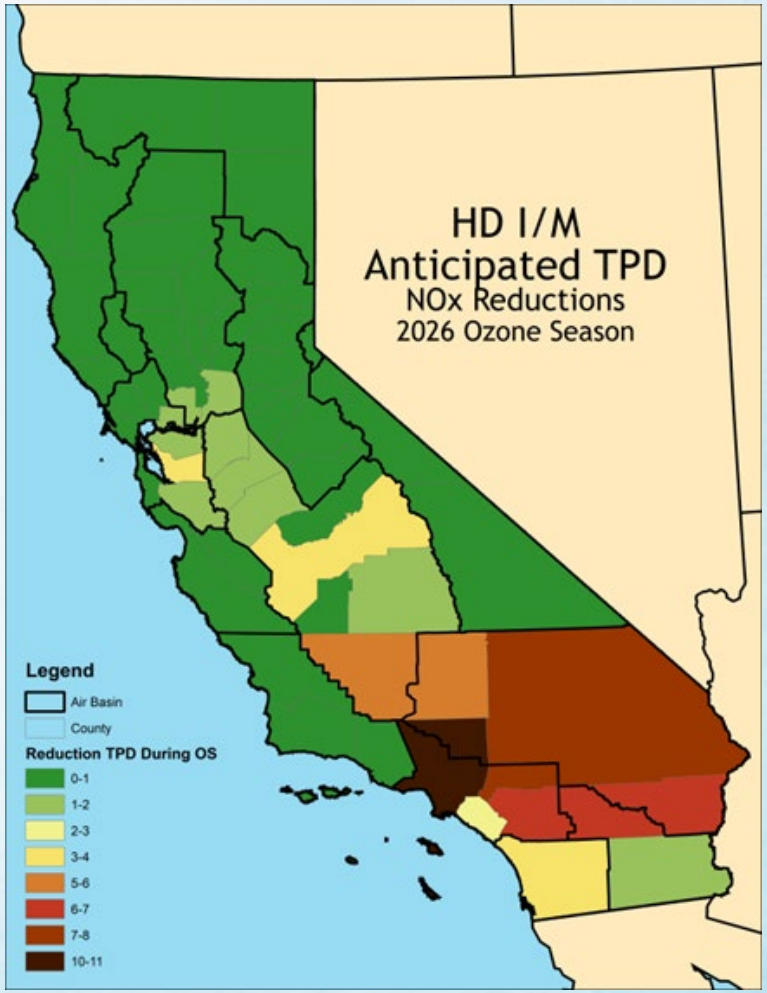
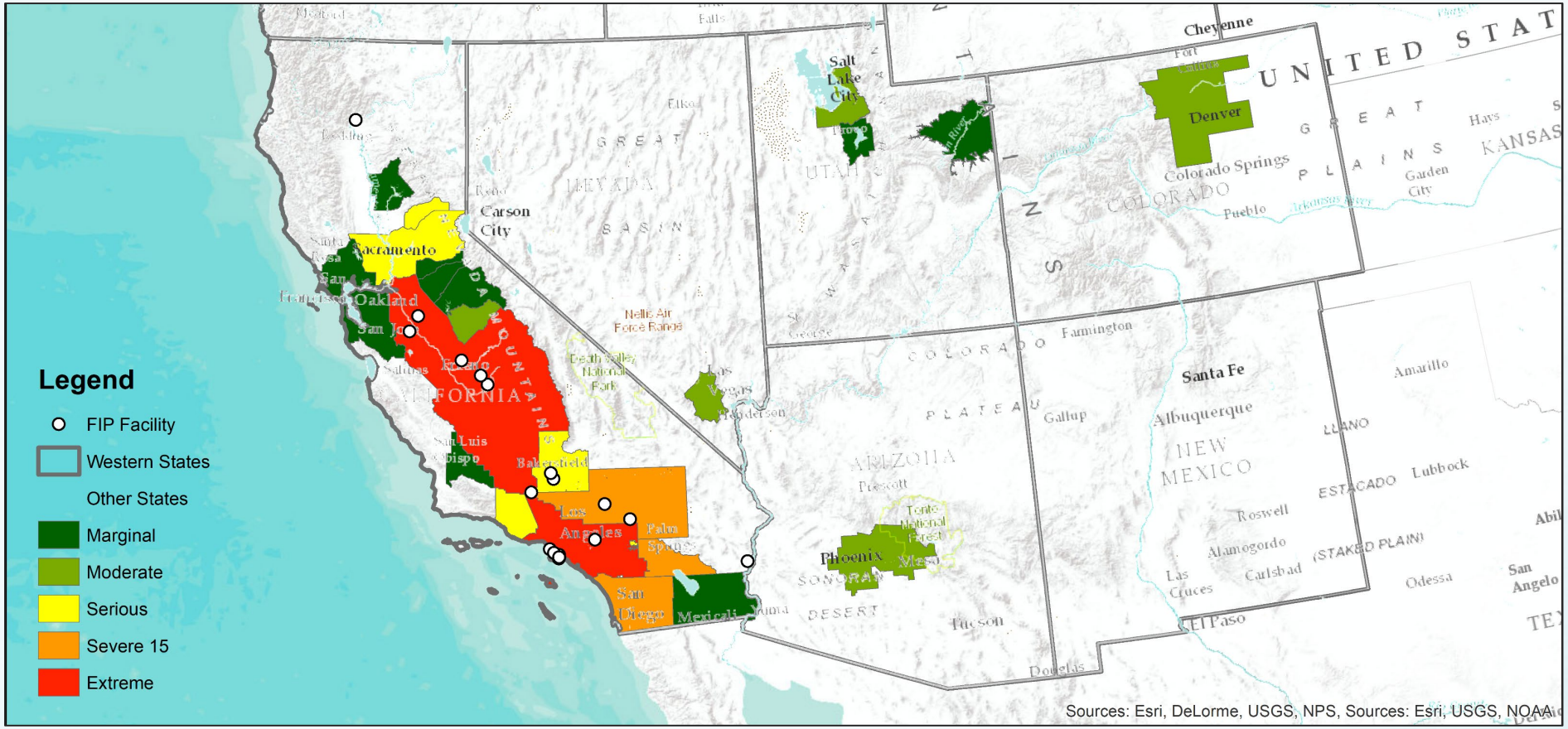
Spatial Impact of Clean Truck Check Reductions Compared to FIP Reductions





Majority of FIP Affected Facilities are Located in California Ozone Nonattainment Areas



Stationary Sources Identified in the FIP

- Current Rules / Emission Permits
  - Most of the stationary sources identified by the FIP already have rules as stringent or more stringent than the FIP requirements
  - FIP reductions likely over estimated
- New Sources
  - New Source Review (NSR)
  - Prevention of Significant Deterioration (PSD)

Collaboration with Air Districts and EPA

- Monthly meetings with the air districts started in May 2023.
  - Districts provided detailed information on their current rules/permits and future plans for the relevant stationary sources
  - Transport SIP draft was shared with the districts for comments
- Meetings with EPA Region 9 and Headquarter staff
  - Transport SIP shared with EPA

Next Steps

- April 17 – Public Workshop Comments
- June 14 – Post for Public Comments
- July 25 – CARB Board Hearing
- August – Submit to EPA

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