

# 2023 Smog Check Reports

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Bureau of Automotive Repair

# Annual Reporting Requirements (1 of 2)

- United States Environmental Protection Agency (US EPA) Report as required by Code of Federal Regulations, title 40, section 51.366
  - Required for state/federal monitoring and evaluation of the Smog Check Program
  - Report is a compilation of program data on inspection volume, failure rates, number of inspector/stations, audit and enforcement programs, etc.
  - Every odd-numbered year the report includes a summary of changes to program design, procedures, regulations, etc.
  - California Air Resources Board (CARB) submits to US EPA by July 31
    - Available upon request from BAR

# Annual Reporting Requirements (2 of 2)

- Smog Check Performance Report (SCPR) as required by California Health and Safety Code section 44024.5(b)
  - Annual assessment of Roadside Inspection Program failure rates vs. Smog Check failure rates
  - Indications of program performance
  - Estimation of potential additional emission reductions
  - Independent review by U.C. Riverside Center for Environmental Research and Technology (CE-CERT)
  - Posted by July 1 on BAR's website at [www.bar.ca.gov](http://www.bar.ca.gov)

# 2009 SCPR Findings and Recommendations

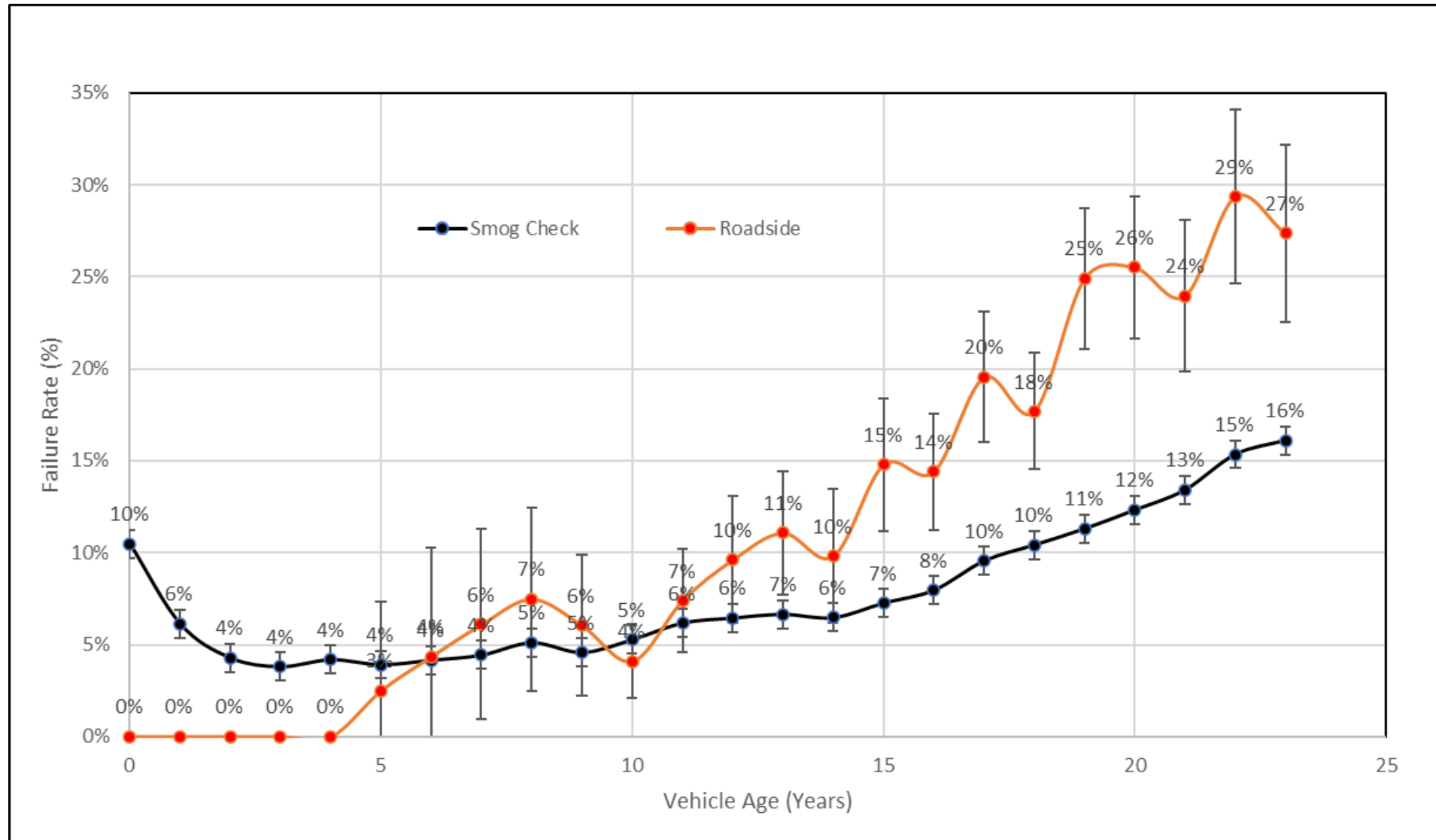
“...many of the vehicles that initially failed during the previous Smog Check cycle were not actually repaired or were repaired only temporarily.”

BAR should:

- Refine station performance algorithms for increased enforcement
- Incentivize high station performance
- Perform confirmatory testing immediately following certification through either roadside or on-site testing
- Continue roadside inspections to audit Smog Check and target low performing stations

# Smog Check and Roadside Failure Rates

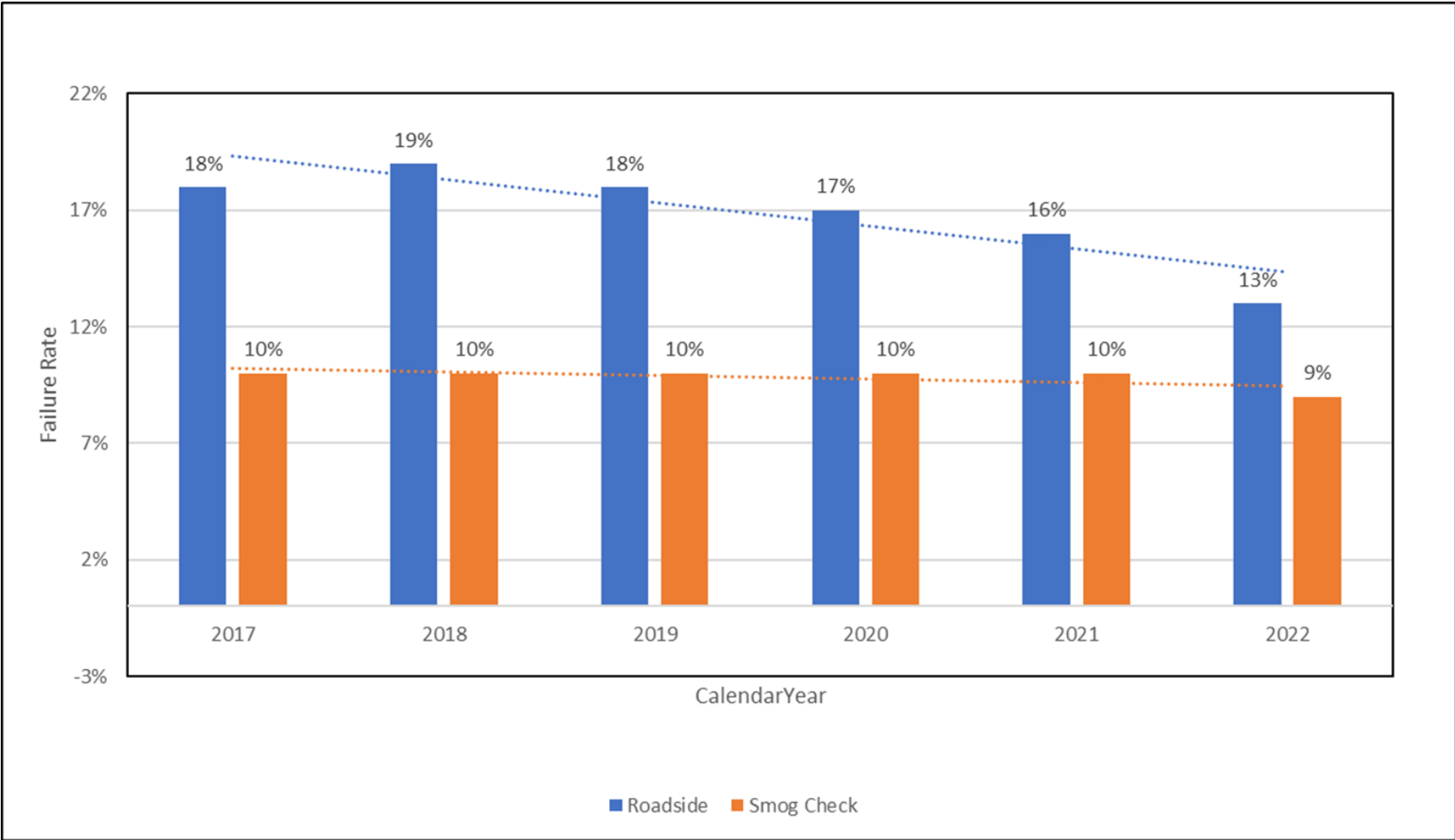
## OIS Tested Vehicles



# 2023 SCPR Findings

- The 2021-2022 roadside failure rate was 14% compared to 16% for the 2020-2021 sample.
- Vehicles certified by “High Performing” Smog Check stations failed at a lower rate at roadside compared to those certified by stations with lower FPR scores.
- Incremental improvements to the program are evidenced by:
  - Declining overall failure rate
  - Narrowing difference between roadside and Smog Check failure rates
  - Increased enforcement actions against stations and technicians engaging in fraudulent practices

# Current and Historic Random Roadside and Smog Check Failure Rates



# BAR Enforcement Activities

- From 2016 to 2022, BAR filed 1,253 “data-only” cases with the Attorney General’s Office, resulting in 1,136 license revocations and 323 suspensions or probations.
- BAR continued administrative disciplinary action against stations suspected of clean-piping, clean-gassing, clean-plugging, and clean-tanking.
- BAR worked with the Department of Motor Vehicles (DMV) to significantly curtail registration-based fraud by DMV business partners.



# Indications of Program Improvement

- Vehicles certified by stations with subsequently revoked licenses failed at consistently higher rates at roadside compared to those certified by stations in good standing.
- Vehicles certified by stations with higher “Follow-up Pass Rates” (FPRs) failed at a lower rate at roadside compared to those with lower FPRs.
- Vehicles certified by STAR stations failed at a lower rate at roadside compared those certified at non-STAR stations.

# Estimation of Additional Benefits

- BAR and CARB staff estimate that Smog Check could provide an additional 56 tons per day reduction of exhaust emission of reactive organic gases (ROG) and oxides of nitrogen (NO<sub>x</sub>) if all stations were high-performing.

# Highlights of 50 State Review

- California 3rd largest network behind New York and Pennsylvania
- Nationwide, the total number of stations decreased between 2021 and 2022
  - California stations reduced by 1,000
  - Tennessee ended light-duty testing 1/14/2022 (16 stations)
- Five state I/M contractors
  - **Opus/Gordon Darby** – 17 states and Washington, D.C.
  - **Applus+ Technologies** – 6 states
  - **Worldwide Environmental** – 4 states
  - **Parsons Engineering** – 3 states
  - **OnCore** – California
- Safety inspections along with emissions are done by 13 states and Washington, D.C.

# Specific Recommendations (1 of 2)

- Centralized testing of pre-1996 MY (non-OBD) vehicles
  - More frequent inspection (annual / fix-it ticket)
- Reduce number of “refusenicks” at roadside
- Work with California Highway Patrol (CHP) to recommit to roadside inspection support
- Perform special roadside evaporative testing
- Incorporate fraud triggers into BAR-97 EIS
- Include otherwise exempted vehicles within the directed sample

# Specific Recommendations (2 of 2)

- Adopt supplemental elements to improve effectiveness or convenience
  - Remote OBD/OBD kiosks/Mobile test platforms
- Work with CARB on future revisions to EMFAC\* to better estimate Smog Check Program benefits

\*EMFAC stands for EMISSION FACTOR, an emissions model for on-road mobile sources in California.

# Contact Information

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