Initial Assessment of SAFE Rule

For NACAA discussion

4/28/2020

FRM Conclusions

- Model year 2021 through 2025 stds revised, 2026 std added
 - Nominally '1.5%/yr' rather than original ~4.7%/yr
 - Actually about 1.8%/yr in the CO₂ standards
- Rollback, by their analysis, is net loss to consumers and society

	FRM
Change in new car purchase price	-\$977
Change in lifetime refueling costs (discounted to current value of money)	+\$1,461
Consumer net	-\$484 to -\$678
Net to Society	-\$22B

FRM Conclusions (cont)

• While highlighting 'saved' lives, FRM actually shows increase in deaths

	FRM
Change in crash fatalities from vehicles meeting FRM standards	-238
Change in fatalities from <i>assumed</i> faster retirement of older cars and less driving of new cars (rebound)	-3,031
Change in premature deaths from worsened air quality	+440 to +1,000

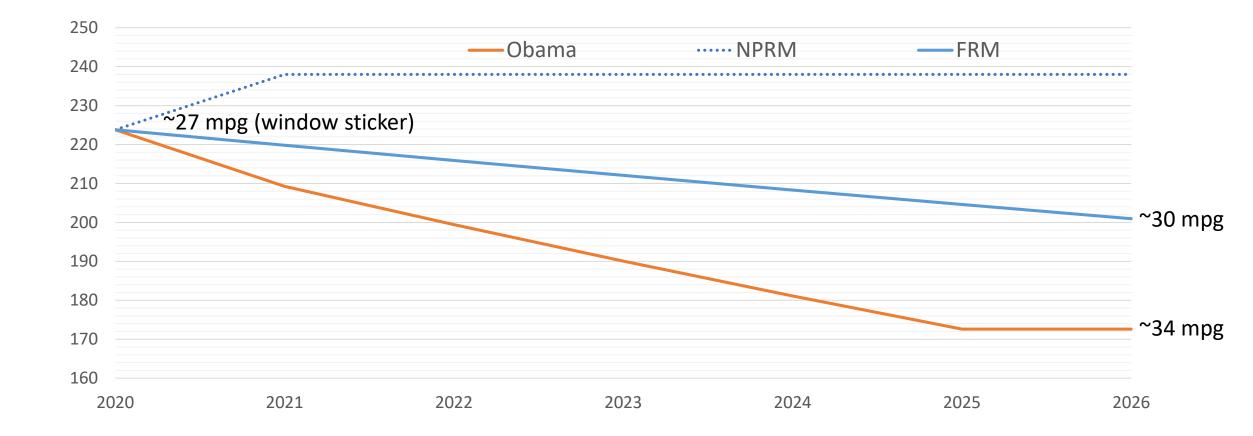
• One clear winner from FRM:

	FRM
Change in fuel used by automotive fleet	+78.3B gallons

General Observations on Analysis

- Directionally improved since NPRM
 - But still turns virtually every knob towards cost overestimation/benefit underestimation
- Still relies on some counter-intuitive outcomes
 - Because future new vehicle fuel economy is worse (weaker standards), then:
 - New cars will be cheaper → Increased new car sales and more old cars will be retired instead
 of kept in the fleet
 - But the new cars will be driven less \rightarrow lower air pollution and GHG emissions, fewer crashes, less traffic congestion
 - And people will go back to buying more cars than trucks \rightarrow lower GHG emissions
 - And OEMs will overcomply with the standards by adding more technology than required
- Still has items disproportionately affecting outcome
 - 3rd highest line item in cumulative dollars is 'congestion costs'
- And by the way, 10,000-20,000 jobs will be lost each year...

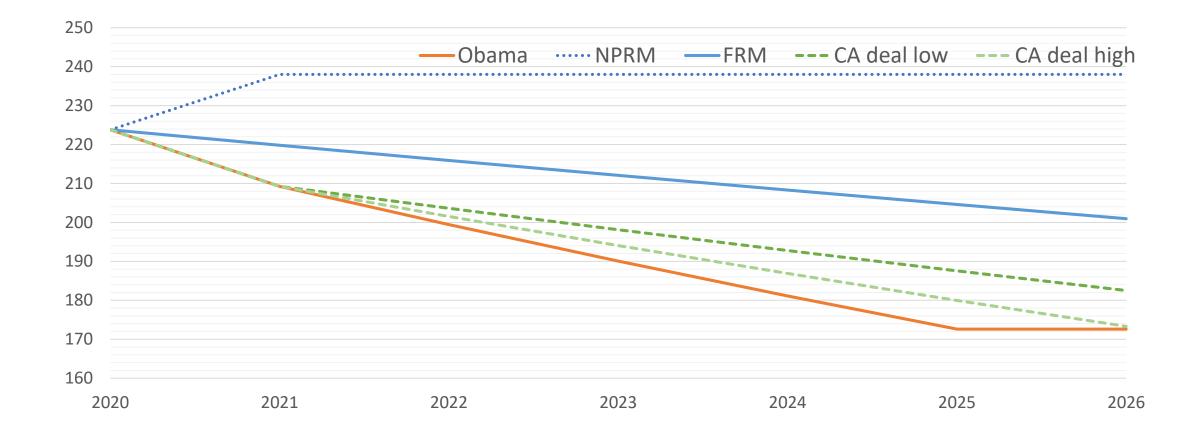
Comparison of CO₂ (g/mi) Standards



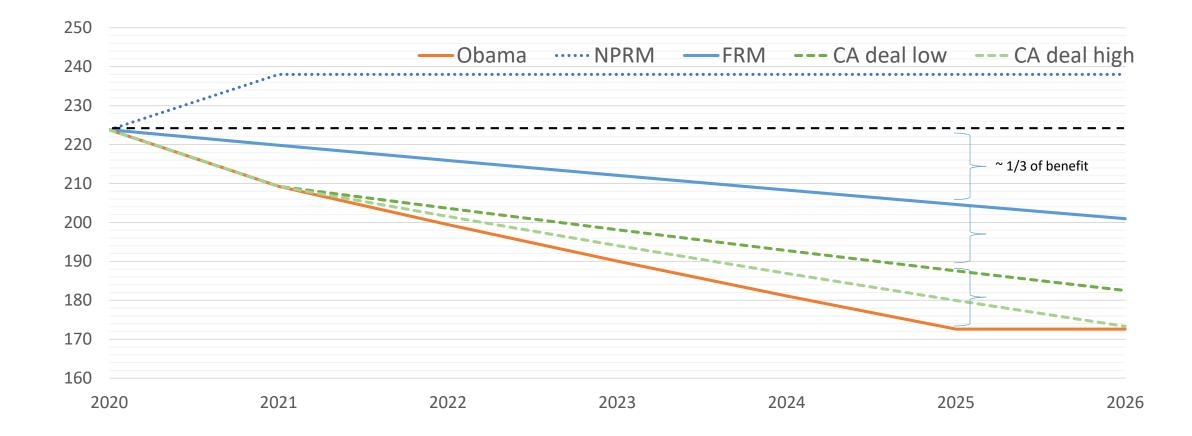
Reminder on CA Deal

- Background
 - Feds were on path to flatline future standards
 - CA/S177 (~35% of the US sales) were on path to maintain current standards
- Negotiated with Ford, VW, BMW, Honda, and tentatively Volvo
 - These OEMs (~35% of US sales) will meet less stringent stds
 - ~Meet '25MY std in '26MY
 - Extended incentives for ZEVs
 - But comply on 50-state sales volume, not CA/S177 sales

Comparison of CO₂ (g/mi) Standards



Comparison of CO₂ (g/mi) Standards (cont)



Next steps

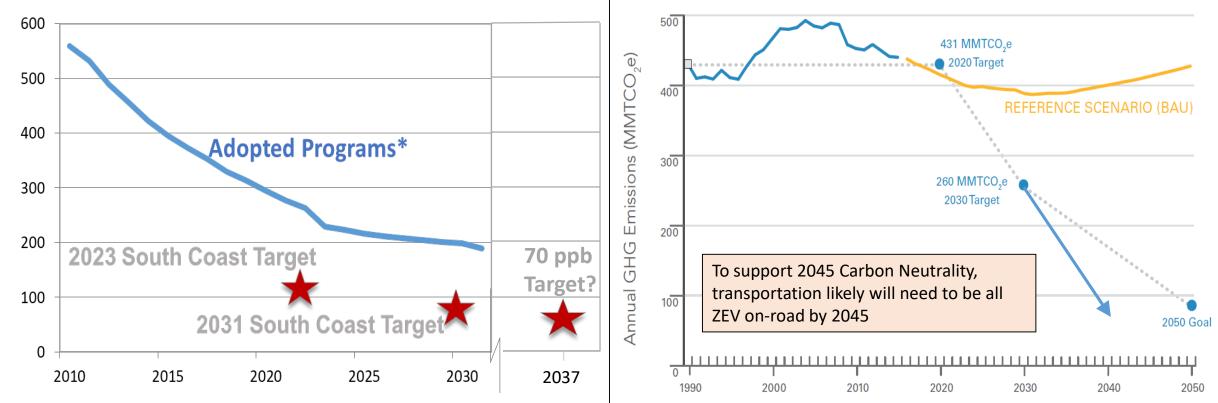
- Working on changes to EMFAC to represent possible outcomes
 - Reflecting SAFE Parts 1 and 2
- Continuing to finalize deal with 4 (5?) OEMs
- Assessing legal options
- Moving forward
 - Work already underway for next round of light-duty standards
 - Need further criteria pollutant reductions for ozone NAAQS
 - Need further GHG reductions for 2030/2045 GHG targets

California's Key Targets

NOx, South Coast, All Sources

NOx Emissions (tons per day)

GHGs, Statewide, All Sources



*Adopted through 2017