# Projecting Emissions Inventories for Air Quality Modeling of Future Years

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### Questions:

1. Where do you get closure information? A: States submit information, plus it is also obtained through public comment and other public data sources.
2. Can states look at the Emission Modeling Framework program or is that just available for EPA staff? A: Anyone can download this -- it's integrated with the Control Strategy Tool located at <https://www.epa.gov/economic-and-cost-analysis-air-pollution-regulations/cost-analysis-modelstools-air-pollution>
3. Is RWC reduction due to displacement of older devices with certified devices, or is it something else? A: Yes, it is due to replacement and also due to regulations. More information is available in this document: <https://www.epa.gov/air-emissions-modeling/additional-updates-2011-and-2023-emissions-version-63-platform-technical> in Section 4.2.3.9.
4. How successful has AEO been at forecasting production, year to year? A: A retrospective of the 2016 and prior reference cases is available here: <https://www.eia.gov/outlooks/aeo/retrospective/>
5. Do you replace default data in the modeling projection when a state provides them? A: Usually. We review the data for reasonableness as compared to other available data sources and will use it if it passes that test. Otherwise, we may follow back up with the state and sometimes have to fall back to default approaches.
6. A recent PNAS article: "Unexpected slowdown of US pollutant emission reduction in the past decade” How is this finding being addressed in projections in modeling platform: "Emissions of NOx have a large impact on air quality and climate change as precursors in the formation of ozone and secondary aerosols. NOx emissions have not been decreasing as expected in recent years (2011–2015) when comparing top-down estimates from satellites and surface NO2 measurements to the trends predicted from the US EPA’s emission inventory data. The discrepancy can be explained by the growing relative contribution of industrial, area, and off-road mobile sources of emissions, decreasing relative contribution of on-road gasoline vehicles, and slower than expected decreases in on-road diesel NOx emissions, with implications for air-quality. “Do modeling platforms consider these kinds of findings? A: We are continuously working to improve our emissions estimates in the NEI and in our modeling platforms, although it is sometimes difficult to do this based on satellite data due to the variety of products and their uses. Keep in mind that satellites typically measure ambient concentrations from all sources, not emissions from expected sources.
7. Is that "external" review that Caroline mentioned then documented for the emissions modeling projections. A: If comments are solicited and received via a formal process (i.e. regulations.gov), then the responses are documented. Otherwise we document the end products, data sources, and methods used to develop our projections.
8. IPM uses least cost analysis to account for effects of rules. Least cost projection method does not account for permit requirements or Public Utility Commissions' approvals. A: IPM runs are not fully least cost, and they also consider a variety of “constraints” that mitigate how emissions are projected into the future. Note that the least cost method available as part of the control strategy tool is much simpler in nature than the one used by IPM.