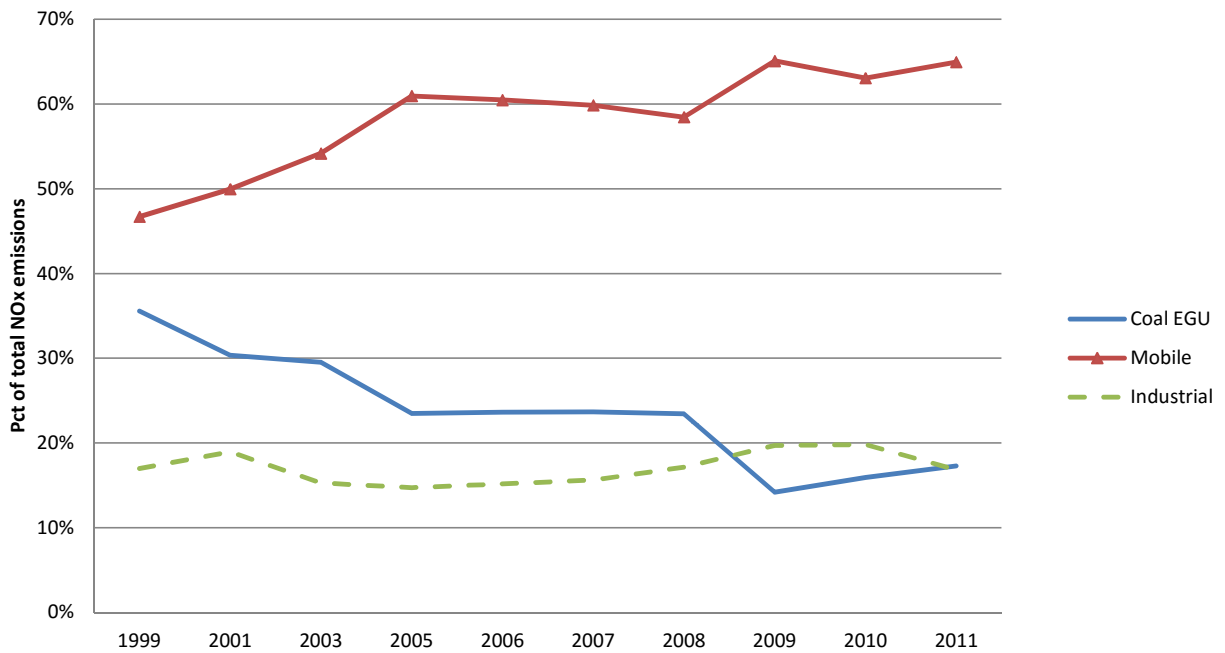


Emissions and Air Quality Data for OTC and 176A Petition
Target States, Historical and 2010-2014

Submitted on behalf of ACCCE and the Midwest Ozone Group

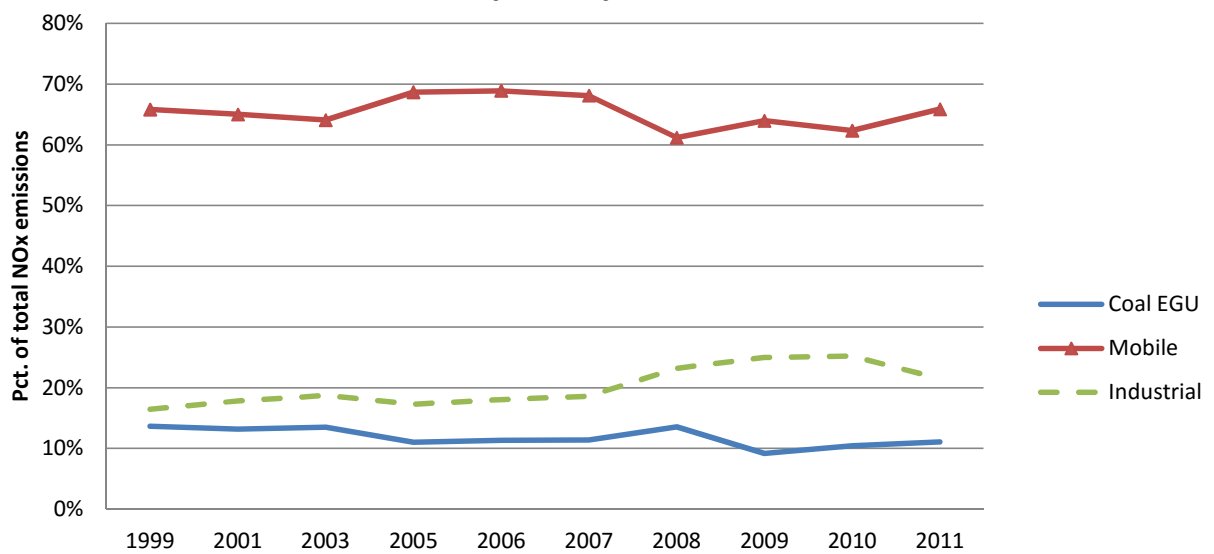
OTC Committees Meeting
Washington, DC
September 10, 2015

**Major source shares of total NOx emissions,
176A states, 1999-2011**



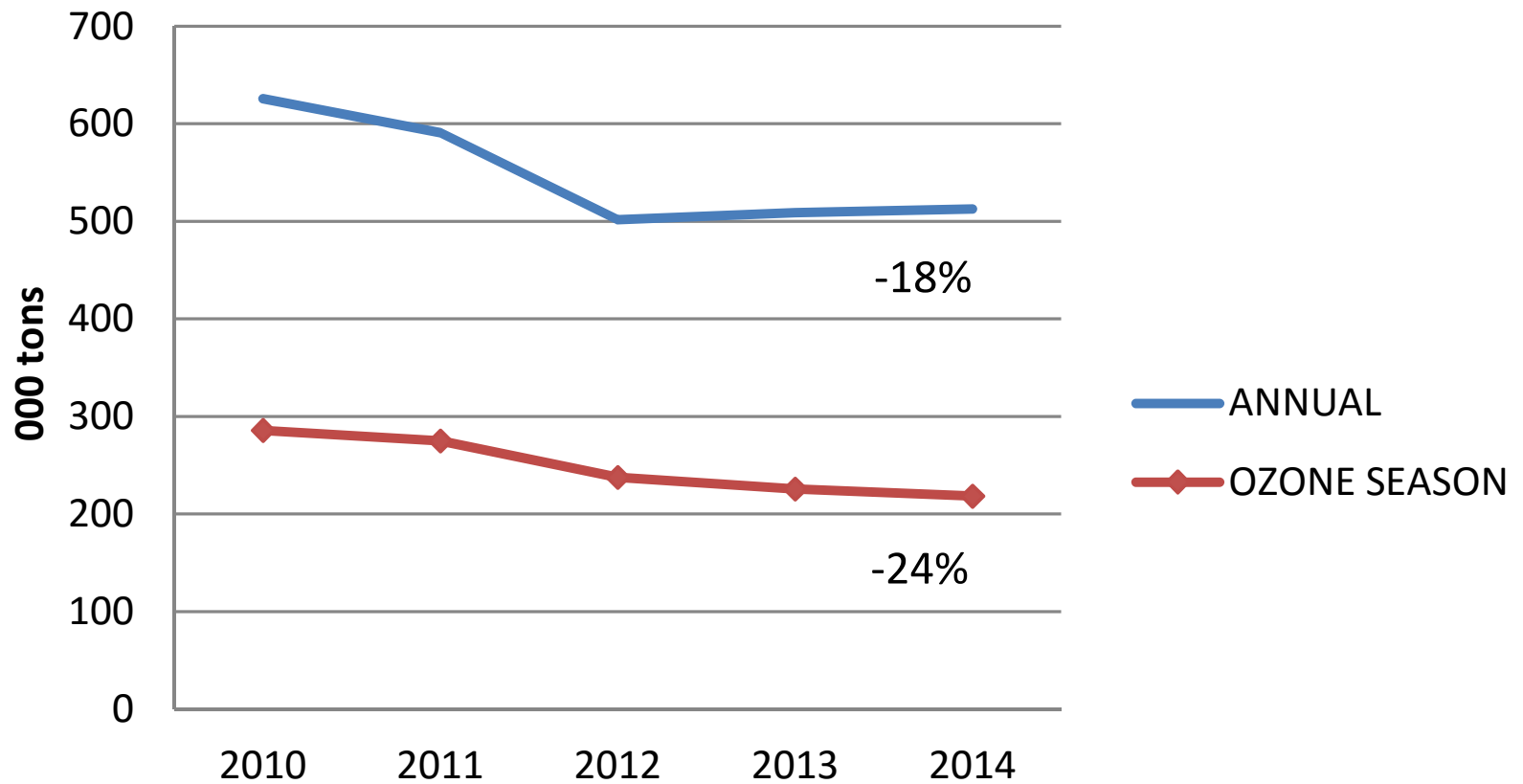
Source: US EPA (Compiled by Alpine Geophysics, LLC)

Major source shares of total NOx emissions, OTR states (ex VA), 1999-2011



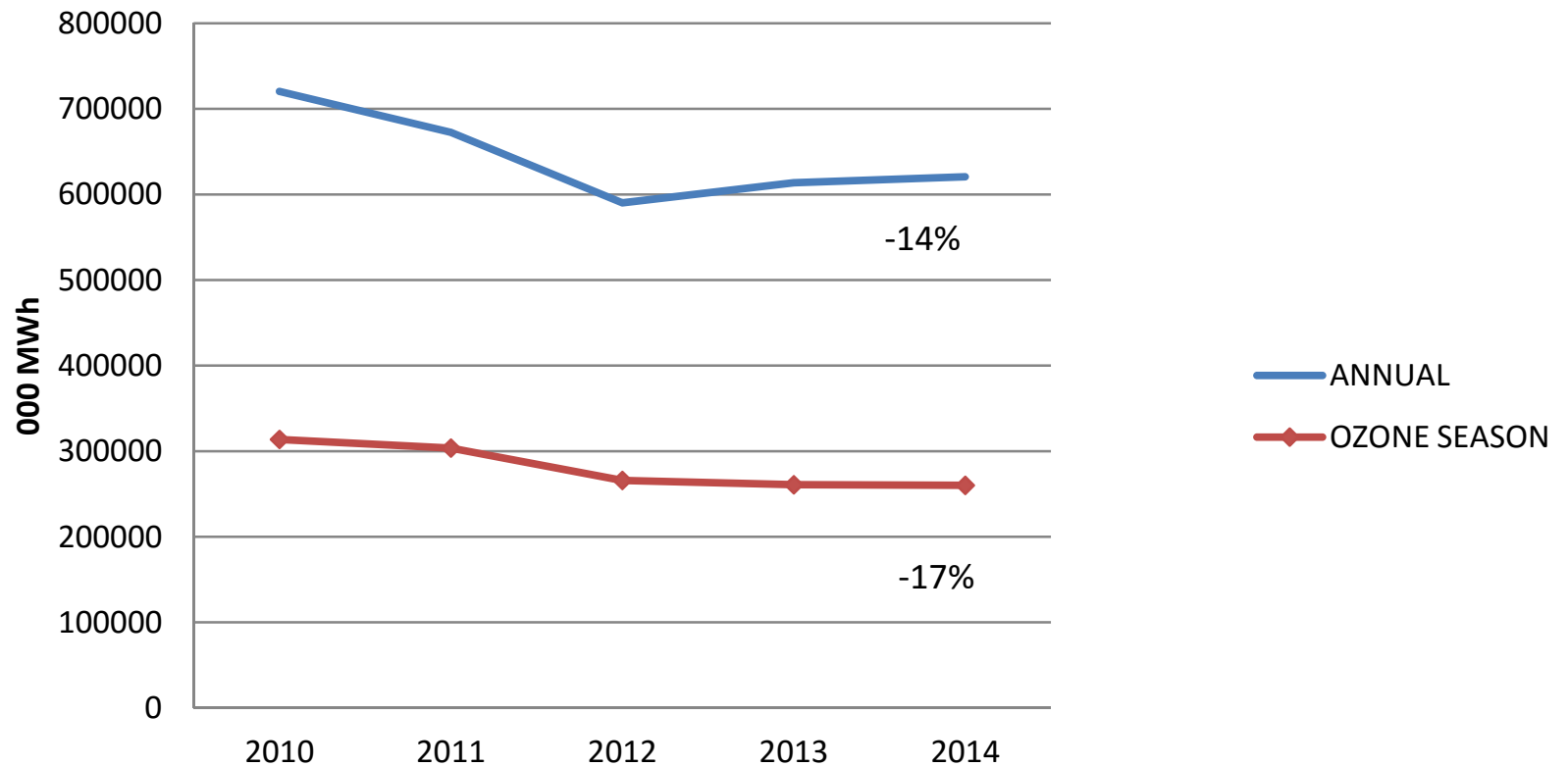
Source: US EPA (Compiled by Alpine Geophysics, LLC)

176A states coal EGU NOx emissions annual and ozone season, 2010-2014



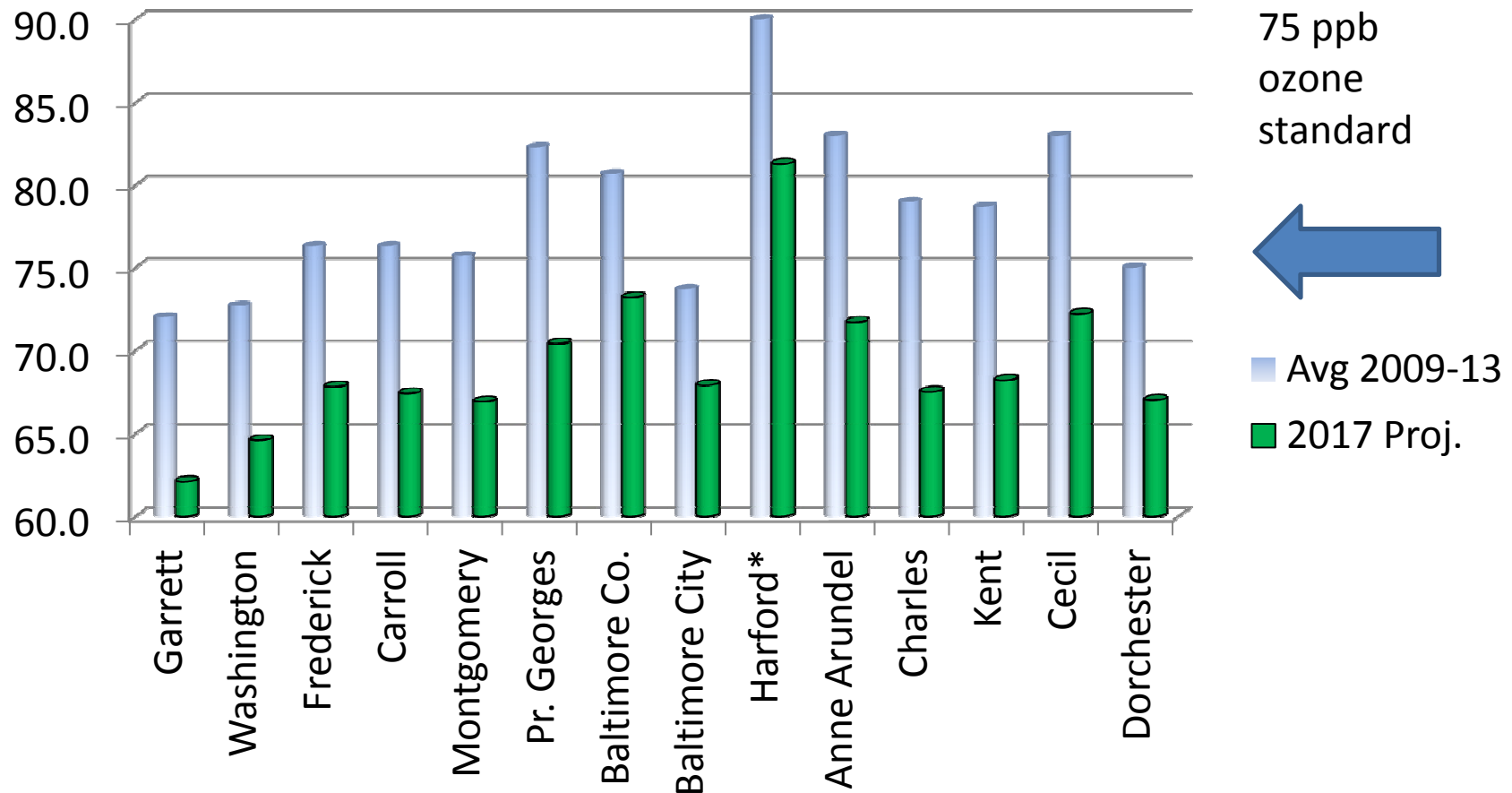
Source: US EPA CAMD Data Base.

176A states coal EGU Gross MWh, annual and ozone season, 2010-2014



Source: US EPA CAMD Data Base.

Maryland ozone air quality improvement, 2009-13 vs 2017 average design values



Source: US EPA Ozone Transport NODA July 2015. Highest 2017 value is shown for sites with multiple monitors.

*Harford monitor registered attainment with 75 ppb standard for 2012-14.

Observations

1) Mobile source NO_x emissions dominate the emissions inventories of both the Northeast OTR region and the nine Midwestern and Southeast states targeted by the 176A petition. The 1999-2011 trends data show that mobile sources are an increasing share of NO_x emissions in the nine 176A target states, largely due to substantial emissions decreases in the coal EGU sector. The shares of the three major source categories in the OTR states are relatively constant. In 2011, onroad and offroad mobile sources contributed six times more NO_x than coal EGUs in the OTR region.

2) EPA CAMD data for annual and ozone season NO_x emissions in the 176A states during the period 2010-2014 show 18% and 24% decreases, respectively, from 2010 to 2014. These reductions reflect coal plant retirements, reduced utilization, and improved environmental performance at operating plants. Between 2010 and 2014, gross MWh generation from coal EGUs in the 176A states decreased by 14%, and by 17% during the ozone season. This 17% reduction, compared with the 24% decrease in ozone season NO_x emissions, indicates a steady improvement in NO_x emission rates for operating coal EGUs in the 176A states.

3) The chart on Maryland ozone design values shows the projected improvement in ozone air quality by 2017 based on data in EPA's July 2015 NODA. Note that the monitor data are arrayed roughly in a west-to-east order, from Garrett County in western Maryland to Dorchester County on the eastern shore. This illustrates that ozone design values tend to increase around more densely populated sites such as Frederick and Montgomery County. The air entering western Maryland at the Garrett County monitor is below the level of the 75 ppb standard based on EPA's very conservative 2009-13 design value calculations, and is projected to improve further to a level of 62 ppb by 2017.

4) MOG does not agree with EPA's 2017 projected design value for the Harford monitor near Baltimore and I-95, which is monitoring attainment with the 75 ppb standard. MOG will submit technical comments to EPA in response to the transport NODA.

5) This brief review of regional emissions trends suggests that OTC should take a broader view of the dynamics affecting the EGU sector, including recent and prospective retirements due to compliance with the MATS rule and increased competition from natural gas. Undue attention to details about the operation of emissions controls at individual plants can obscure the larger picture of steady and continuing air quality improvements and emissions reductions within both the OTR and the 176A states.

6) We continue to support the OTC's programs in areas such as the aftermarket catalyst rule and other initiatives that can help to reduce mobile source emissions in the Northeast. We also support continuing development of emissions inventory work for distributed generation sources, which seem to play a critical role in ozone during high electric demand days.