# Update on OTC Modeling Effort

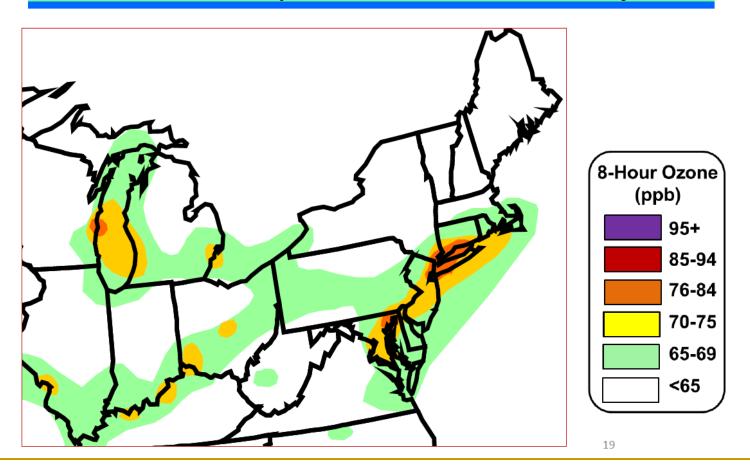
Sunil Kumar MWAQC-TAC October 13, 2015

#### **Emission Inventory Update**

- OTC Modeling Committee is currently working to:
  - Develop and improve emissions inventories for 2011, 2017, 2018, and 2028
  - Develop emission estimates for High Electricity Demand Days (HEDD)
  - Revise the 2018 future year projection to 2017
  - Further improve model performance
  - Assess attainment status and modeling needs for the 2015 ozone NAAQS revision
  - Produce additional modeling results by the OTC Fall Meeting in November

### **Photochemical Modeling Results**

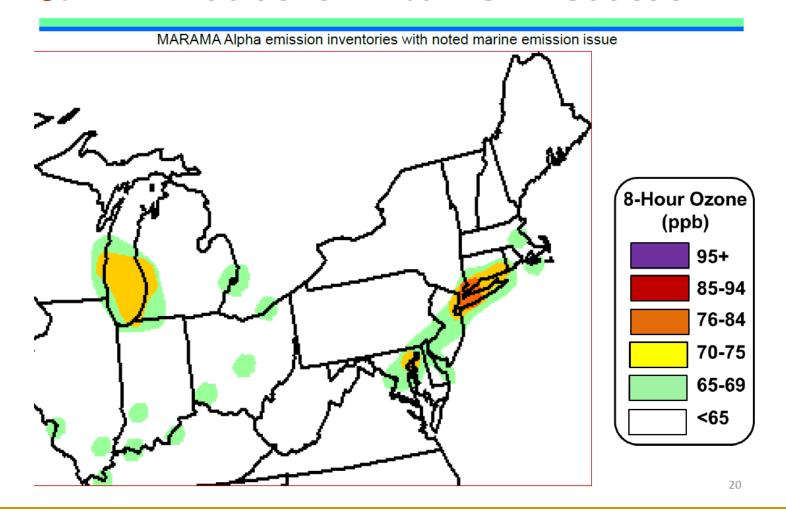
4. OTC 2018 Base Case
MARAMA Alpha2 Emission Inventory



Source: OTC Meeting, 09/10/2015

### **Photochemical Modeling Results**

#### 5. 2018 Additional 25% NOx Reduction



Source: OTC Meeting, 09/10/2015

## **High Electricity Demand Days (HEDD)**

- More electricity generation on HEDD
  - More generation leads to more emissions
  - HEDD days typically occur on hot, humid days that are already conducive to high ozone
  - Therefore the higher emissions often occur during critical periods

- Not all emissions during HEDD periods reported
  - Emissions need to be added to the inventory during HEDD periods to reflect actual emissions