

Oil and Gas Point Source inventory: post-beta analysis

2016 O&G Workgroup

April 8, 2019

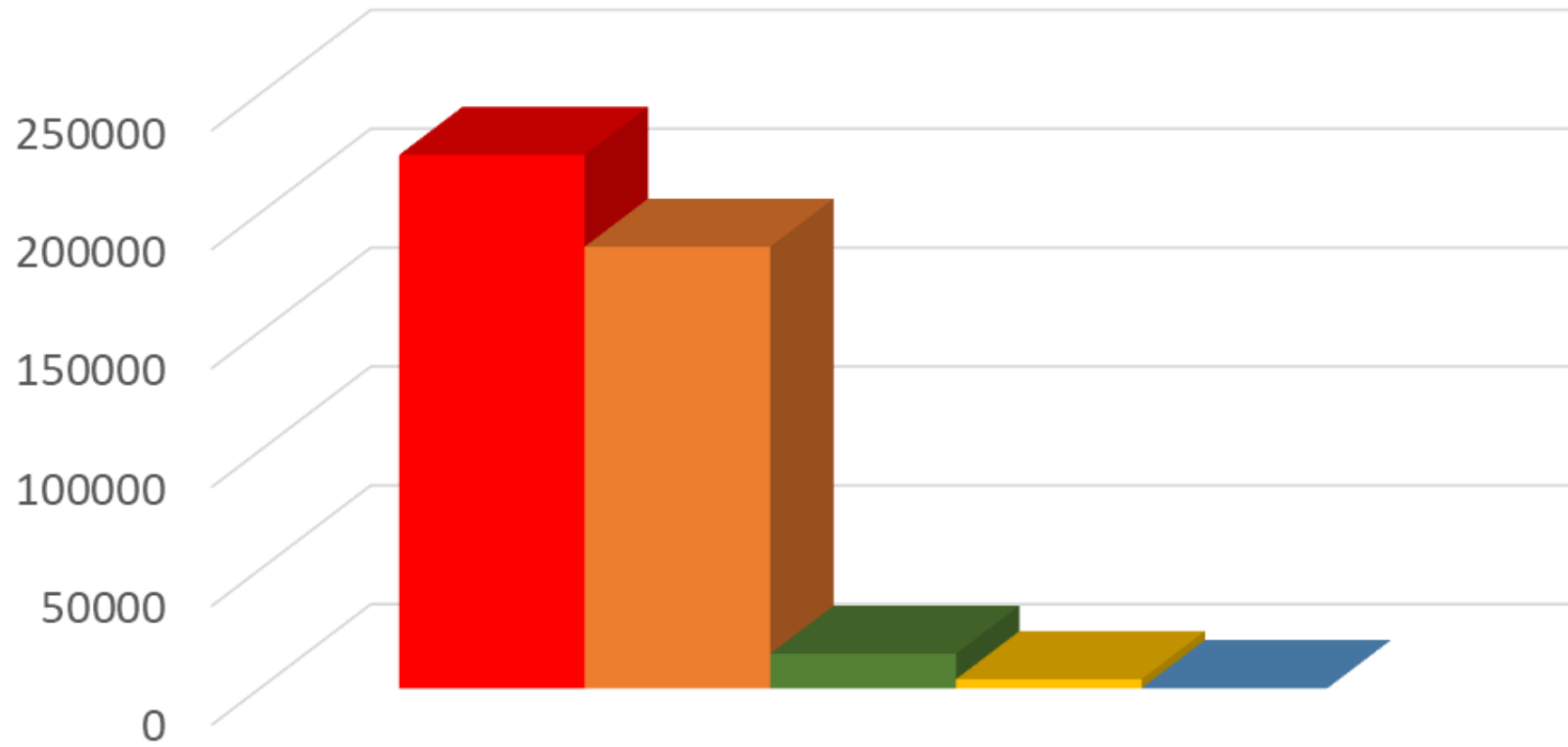
Source Clusters used in categorizing emissions for projections and also could combine non-point and point and categorize/quality assure

| Industry Segment | SCC Clusters | NAICS for Point Sources | Area SCCs | 2016beta approach | 2016v1 approach |
|-----------------------------------------------|--------------|---------------------------|----------------------------------------------------|----------------------------------------------|-----------------------------------------------|
| Exploration | 1-5 | 213111,211111, 211112 | National Emissions Tool SCCs or State E&P Approach | AEO 2018 Reference Case: Production forecast | AEO 2019 Reference Case?: Production forecast |
| Production | | | | AEO 2018 Reference Case: Production forecast | AEO 2019 Reference Case?: Production forecast |
| Gathering | | | | AEO 2018 Reference Case: Production forecast | AEO 2019 Reference Case?: Production forecast |
| Processing | | | | AEO 2018 Reference Case: Production forecast | AEO 2019 Reference Case?: Production forecast |
| Storage ? | 6,7 | 486110, 486210, 424710 | Point only | No growth | AEO 2019 Reference Case?: Which table? |
| Transmission | | | Point only | No growth | AEO 2019 Reference Case?: Which table? |
| Distribution | 8 | 221210 | Point only | No growth | AEO 2019 Reference Case?: Which table? |
| Support Activities for Oil and Gas Operations | 9 | 213112 | Point only | No growth | AEO 2019 Reference Case?: Which table? |

List of NAICS codes in Oil and Gas Point Source

| NAICS | NAICS_DESC | Product | Industry Segment category |
|--------|-----------------------------------------------|---------|---------------------------------|
| 2111 | Oil and Gas Extraction | Both | Gathering/Processing/Production |
| 21111 | Oil and Gas Extraction | Both | Gathering/Processing/Production |
| 211111 | Crude Petroleum and Natural Gas Extraction | Both | Gathering/Processing/Production |
| 211112 | Natural Gas Liquid Extraction | NGAS | Gathering/Processing/Production |
| 213111 | Drilling Oil and Gas Wells | Both | Exploration |
| 213112 | Support Activities for Oil and Gas Operations | Both | Support Activities |
| 2212 | Natural Gas Distribution | NGAS | Distribution |
| 22121 | Natural Gas Distribution | NGAS | Distribution |
| 221210 | Natural Gas Distribution | NGAS | Distribution |
| 48611 | Pipeline Transportation of Crude Oil | OIL | Transmission |
| 486110 | Pipeline Transportation of Crude Oil | OIL | Transmission |
| 4862 | Pipeline Transportation of Natural Gas | NGAS | Transmission |
| 48621 | Pipeline Transportation of Natural Gas | NGAS | Transmission |
| 486210 | Pipeline Transportation of Natural Gas | NGAS | Transmission |

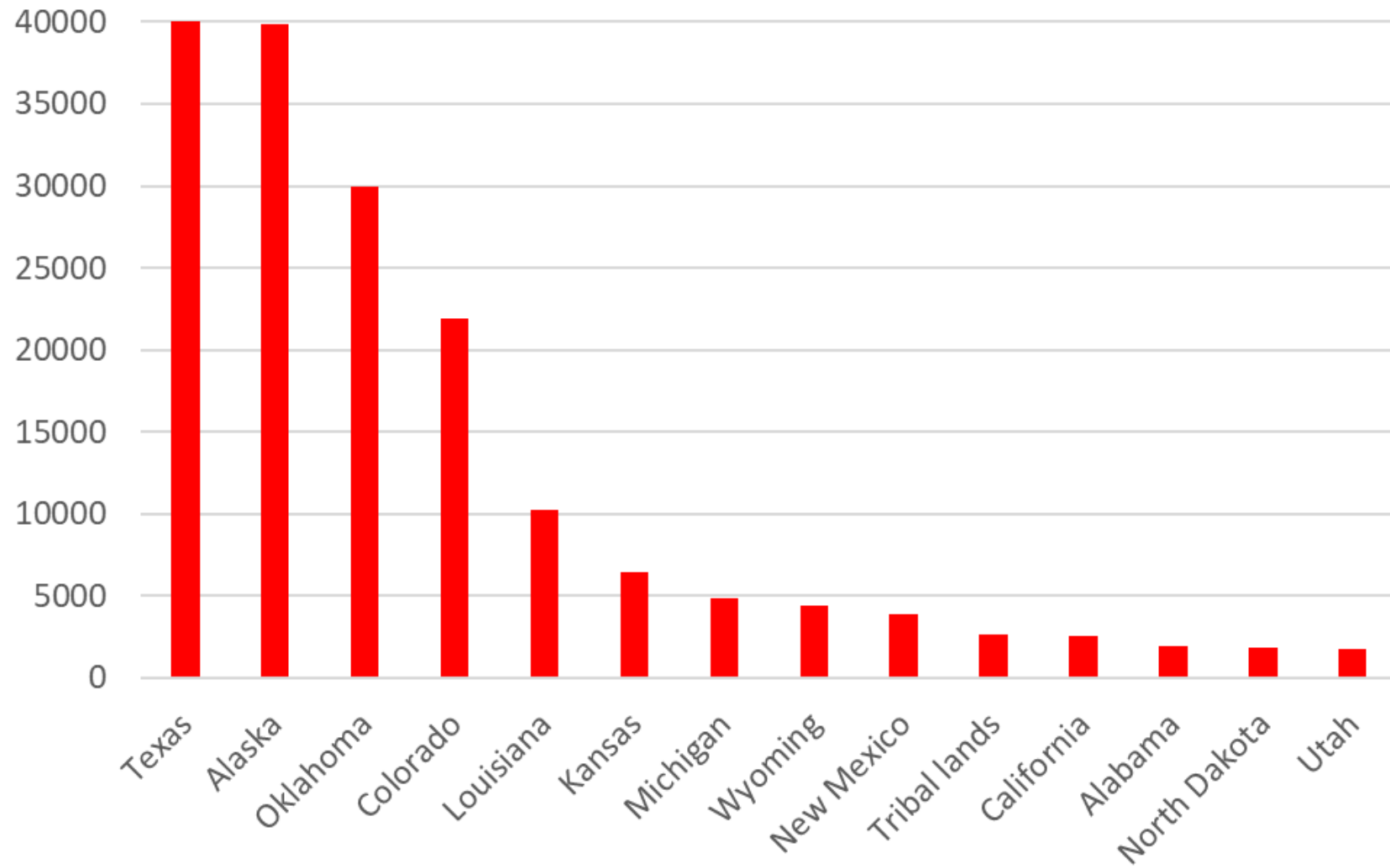
Oil and Gas Point Source: NOx (tons/yr)



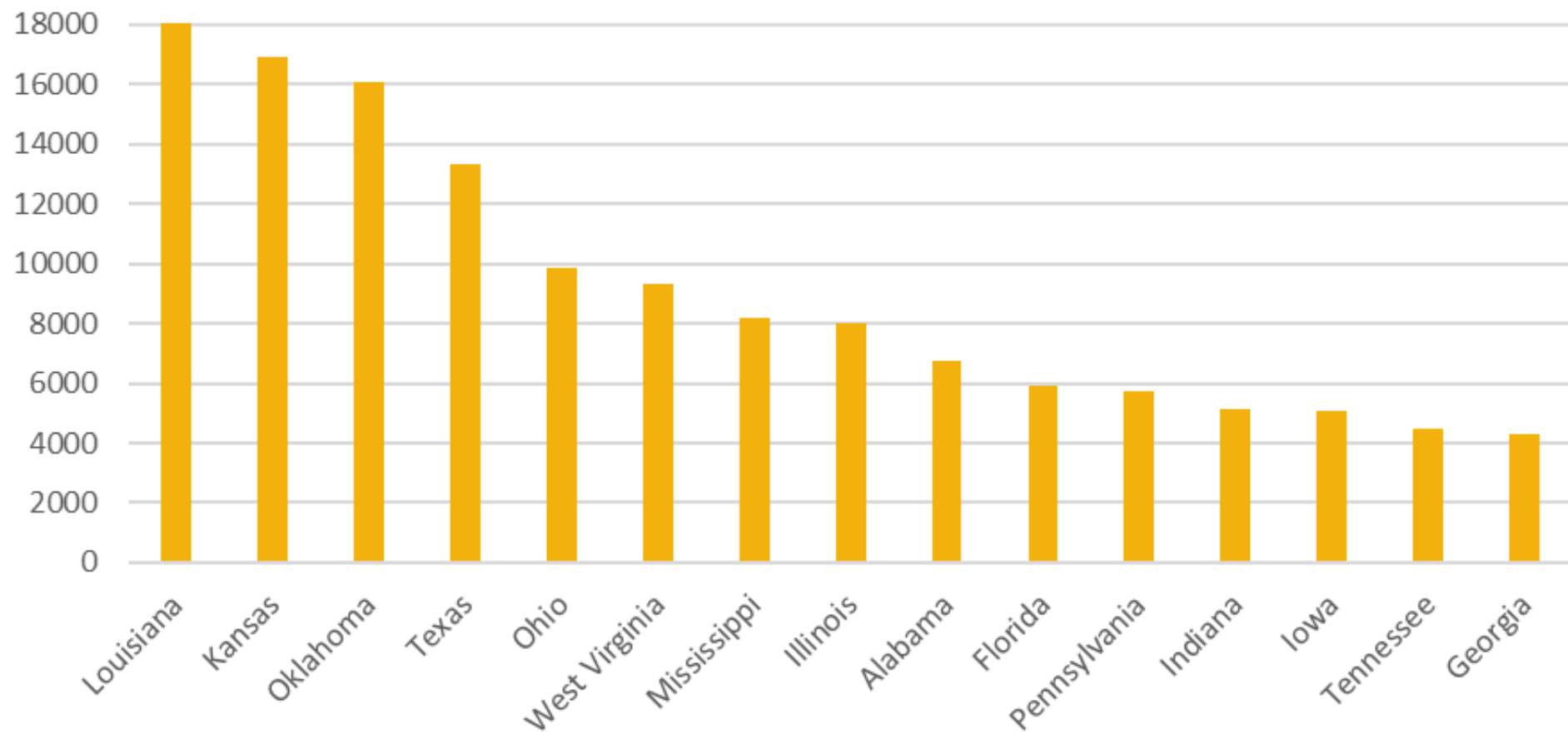
■ Gathering/Processing/Production
■ Distribution
■ Exploration

■ Transmission
■ Support Activities

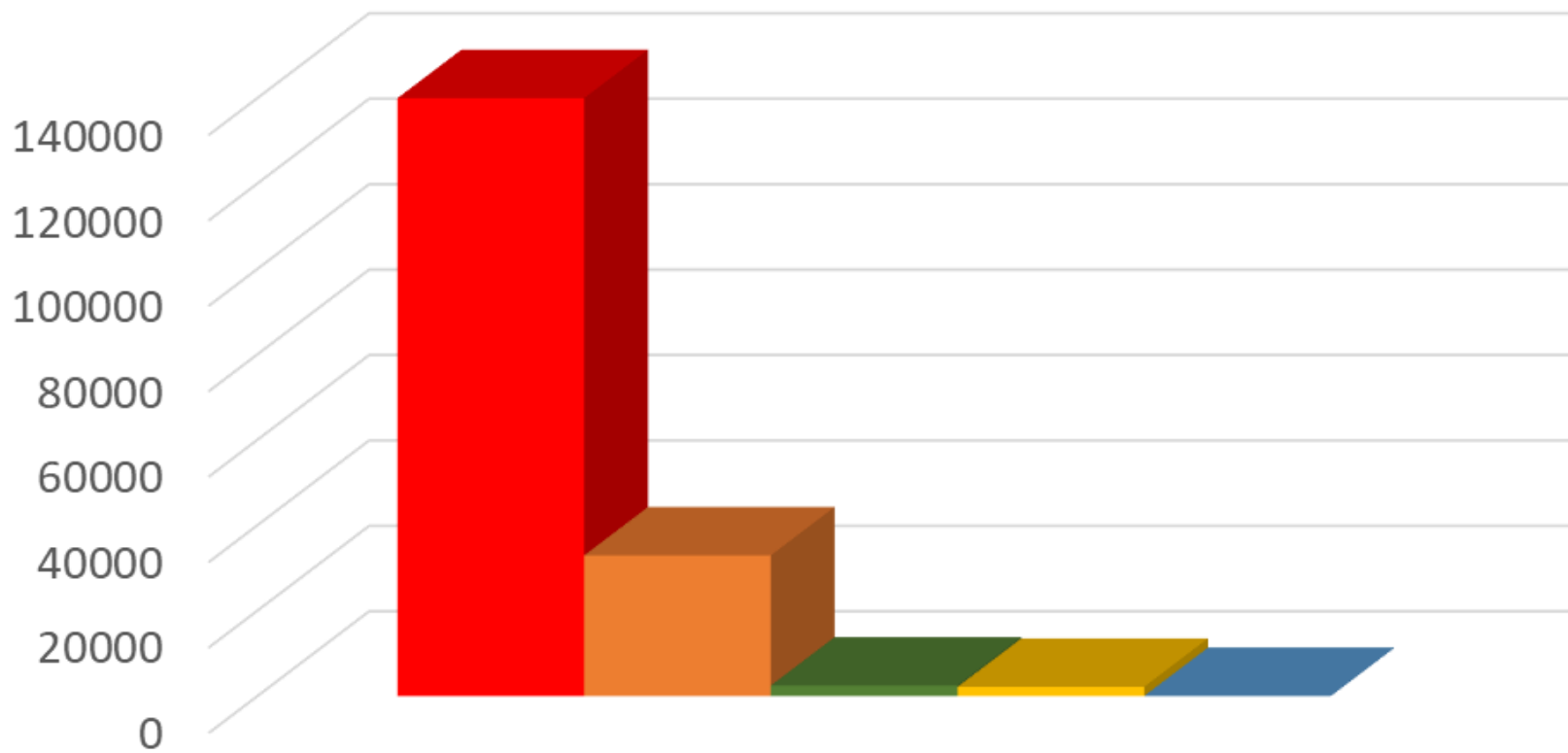
Oil and Gas Point Source: NOx (tons/yr)
Gathering/Processing/Production



Oil and Gas Point Source: NOx (tons/yr) Transmission



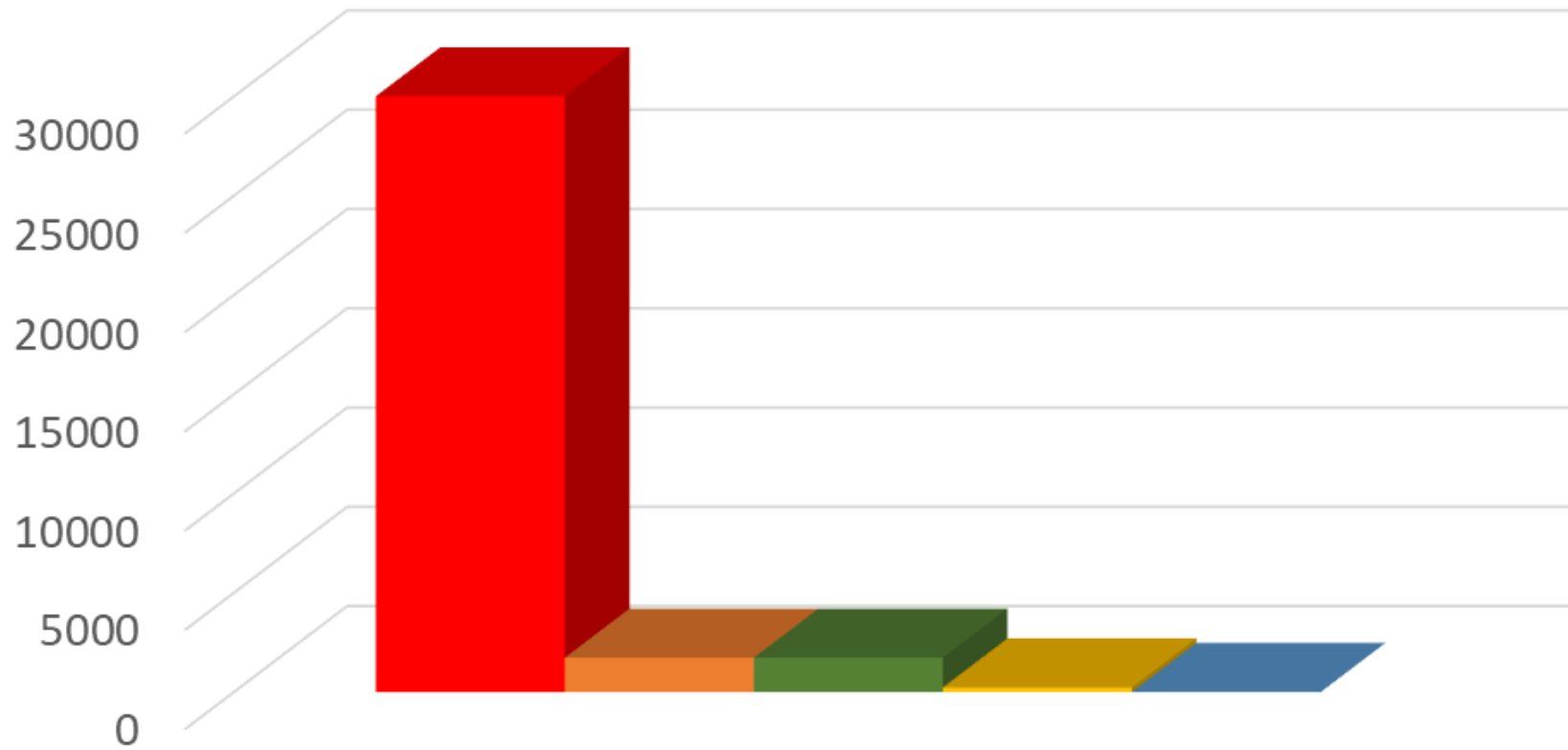
Oil and Gas Point Source: VOC (tons/yr)



■ Gathering/Processing/Production
■ Distribution
■ Exploration

■ Transmission
■ Support Activities

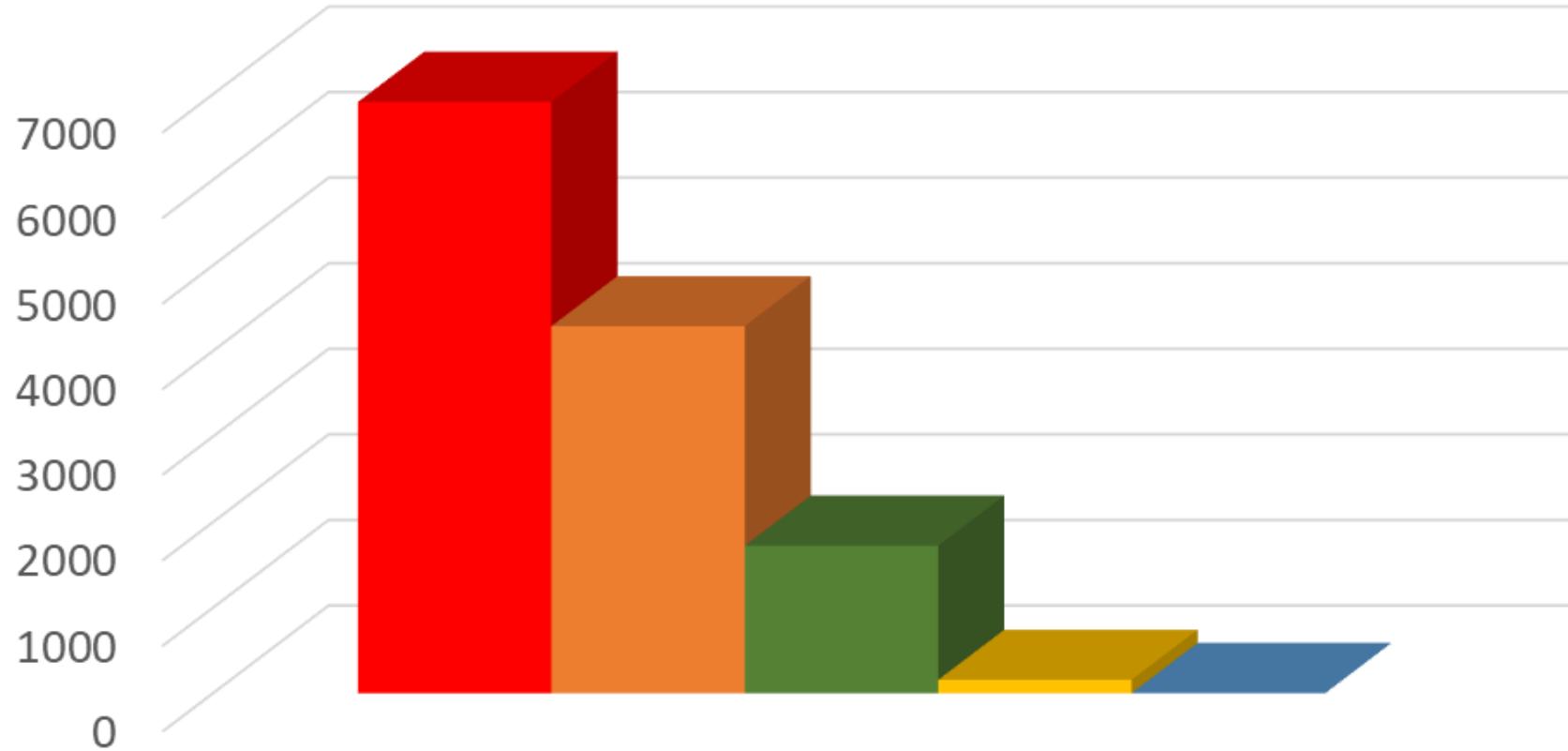
Oil and Gas Point Source: SO2 (tons/yr)



- Gathering/Processing/Production
- Transmission
- Transmission
- Exploration

- Transmission
- Support Activities

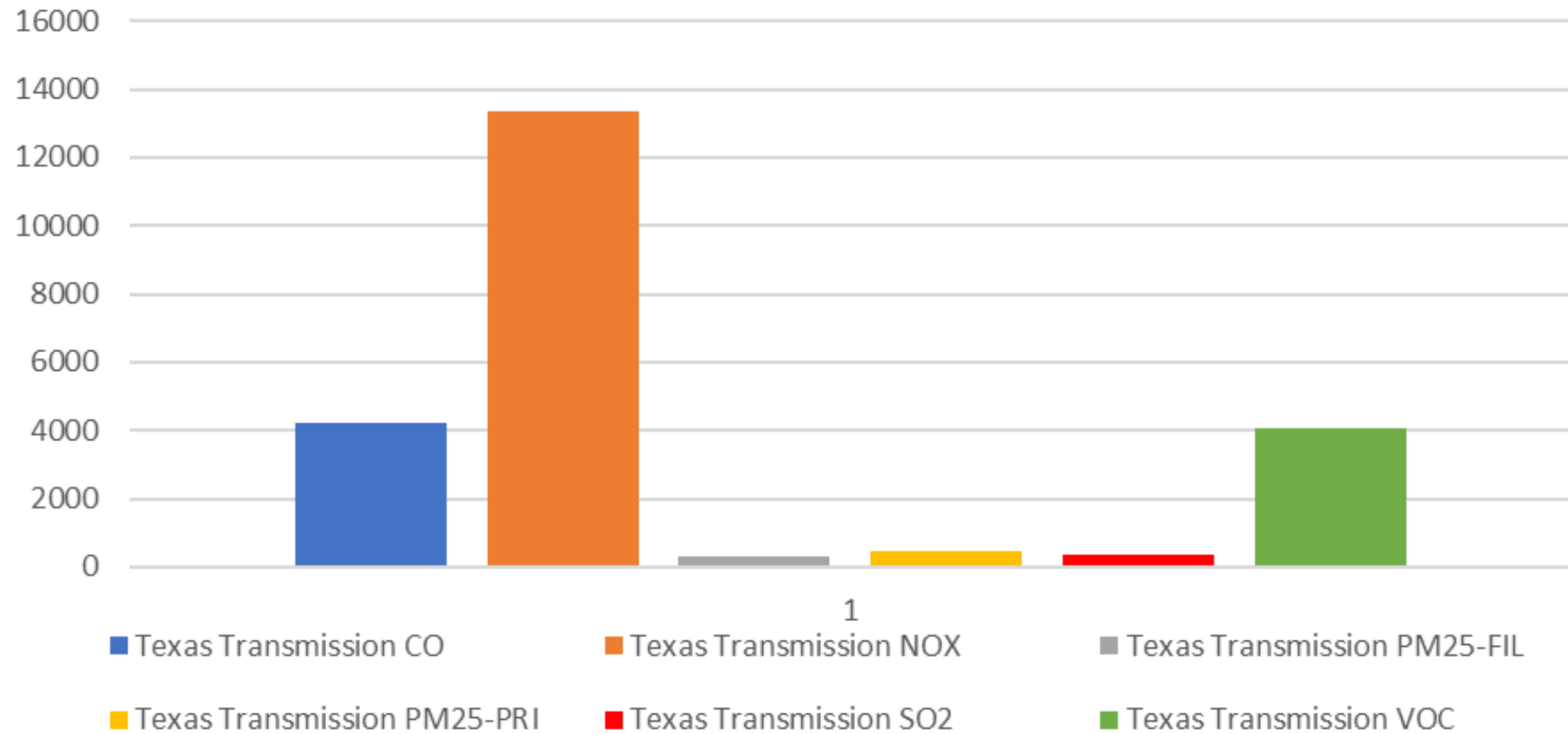
Oil and Gas Point Source: PM2_5 (tons/yr)



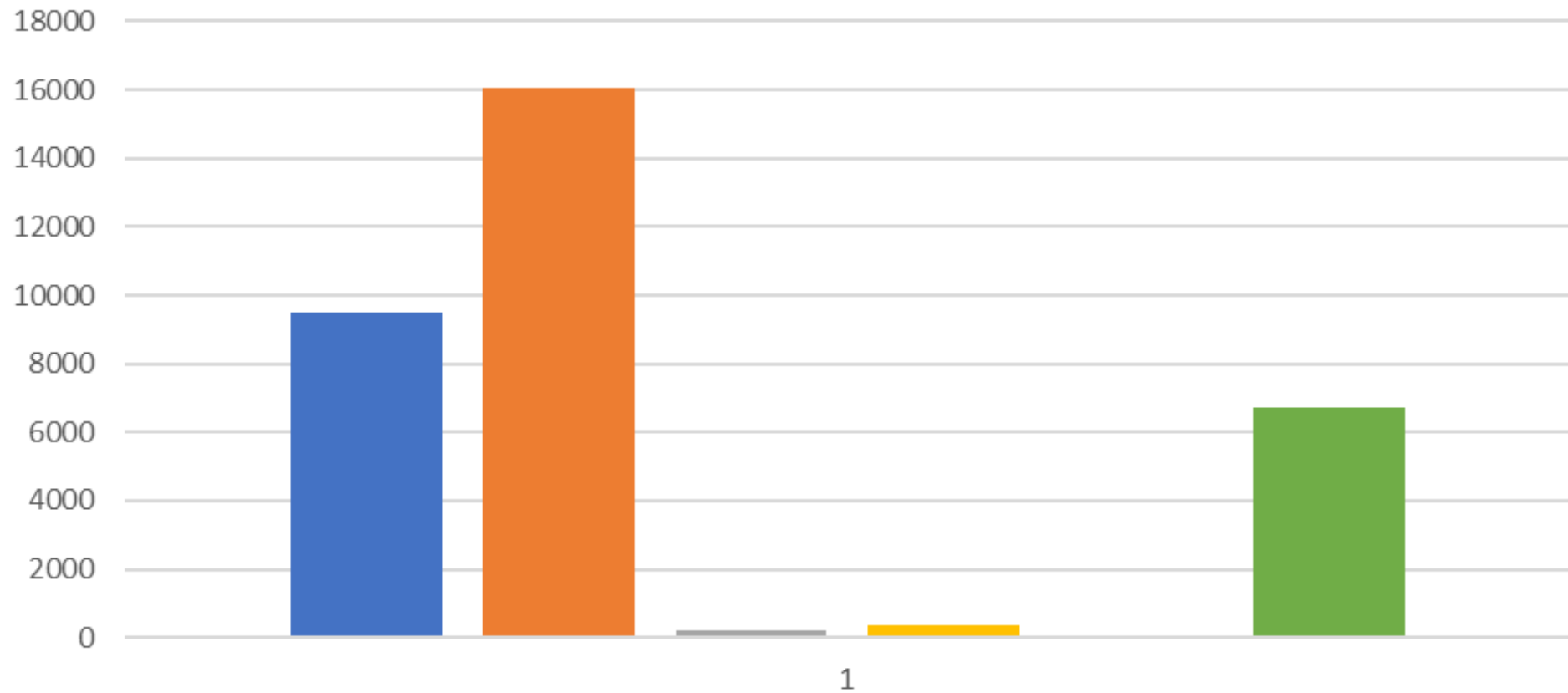
■ Gathering/Processing/Production
■ Transmission
■ Exploration

■ Transmission
■ Support Activities

Texas Point Source: Emissions from Transmission processes (tons/year)



Oklahoma Point Source: Emissions from Transmission Sources (tons/yr)



■ Transmission CO

■ Transmission NOX

■ Transmission PM25-FIL

■ Transmission PM25-PRI

■ Transmission SO2

■ Transmission VOC

West Virginia Point Source: Emissions from Transmissions Sources (tons/yr)

