CAER – Short Term Win

National Emissions Inventory (NEI)
Data Augmentation Reduction

Project Description

- The NEI Data Augmentation Reduction project is working to reduce NEI augmentation and the associated time that the EPA needs to augment state/local and tribal (SLT) submitted data. A group of SLT air agencies is working with the EPA to define all data criteria which SLT submittals must meet. This will minimize, and could eventually eliminate, the need for EPA augmentation.

Goals of the Project

- To understanding why EPA augments SLT data
- To understand why SLTs are unable to provide the data which is augmented, and to eliminate those obstacles where possible
- To create a tool or reference which will minimize or eliminate the need for EPA augmentation.
- To identify changes to EPA's augmentation where it can be improved or eliminated.
- Funding - $20K

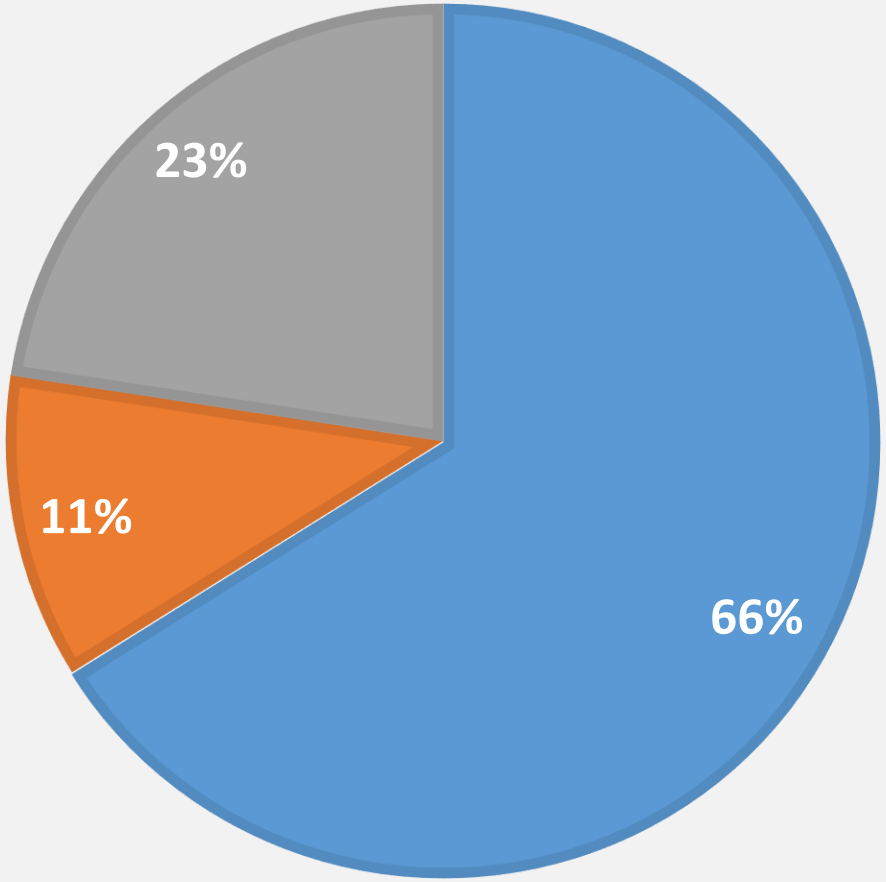
Members of the Team

- Michael Burton, AZ, Co-Lead
- Sally Dombrowski, EPA, Co-Lead
- Joshua Kalfas, OK
- Jeff Merrell, VT
- Lynn Barnes, SC
- Kent Thomas, AK
- Mark Wert, MA
- Brandy Albertson, OR
- Sue Hines, VA
- E-Enterprise
  - Shana Harbour, EPA
  - Beth Graves, Environmental Council of States (ECOS)
  - Kelly Poole, ECOS

Arizona Survey to SLTs

- How do facilities submit emissions data to SLTs?
- How do you (SLTs) submit data to EPA's EIS?
- Is there any reason (regulation, office, policy, politics, etc.) why you cannot augment data received from industry?
- Do you augment data received from industry?
- Is your reporting date mandated by Regulation?
- What is your ability to change regulations regarding reporting data?
- When is reporting required?
- Who makes SCC assignments used in inventory?
- Who calculates emissions used in inventory?
- Survey sent to 64 agencies. Respondents listed in Appendix D of documentation

How do you (SLTs) submit data to EPA's EIS?



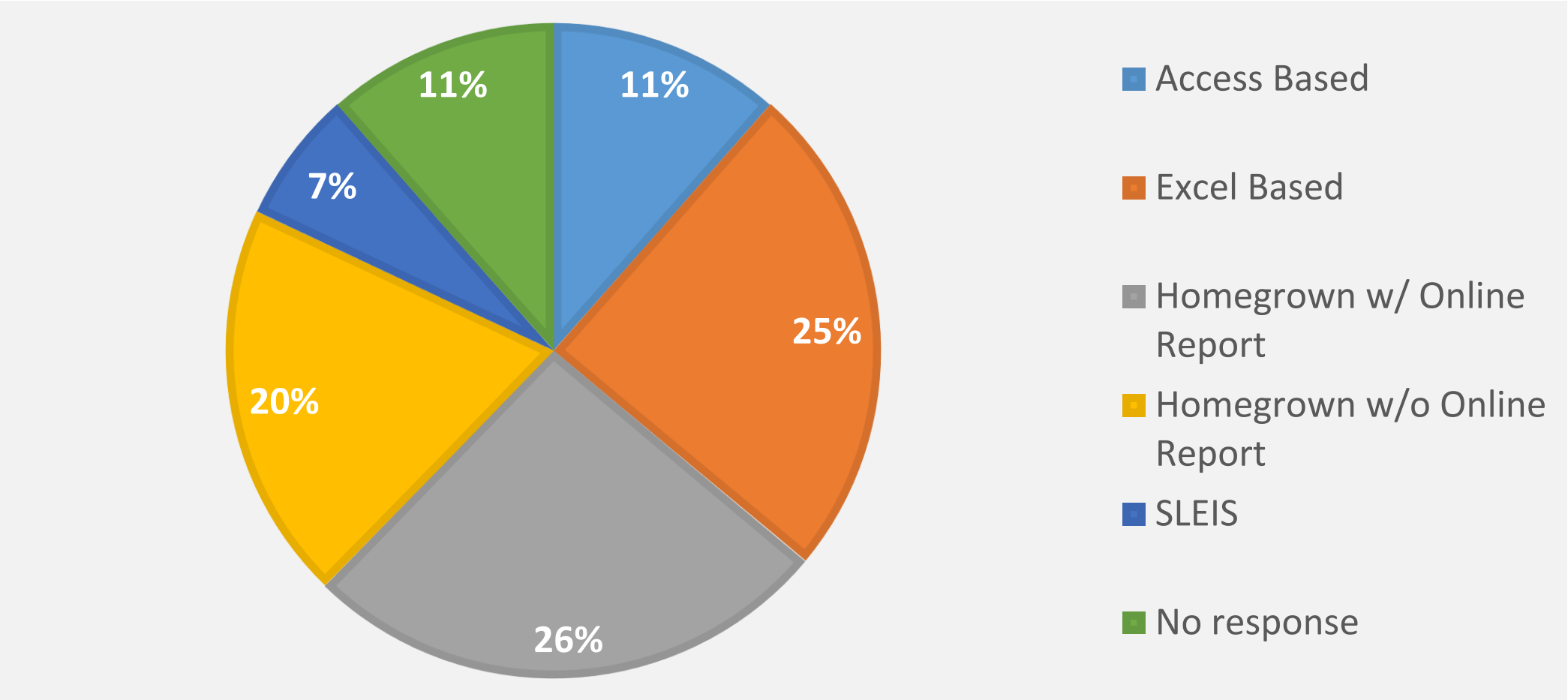
Bridge Tool

SLEIS

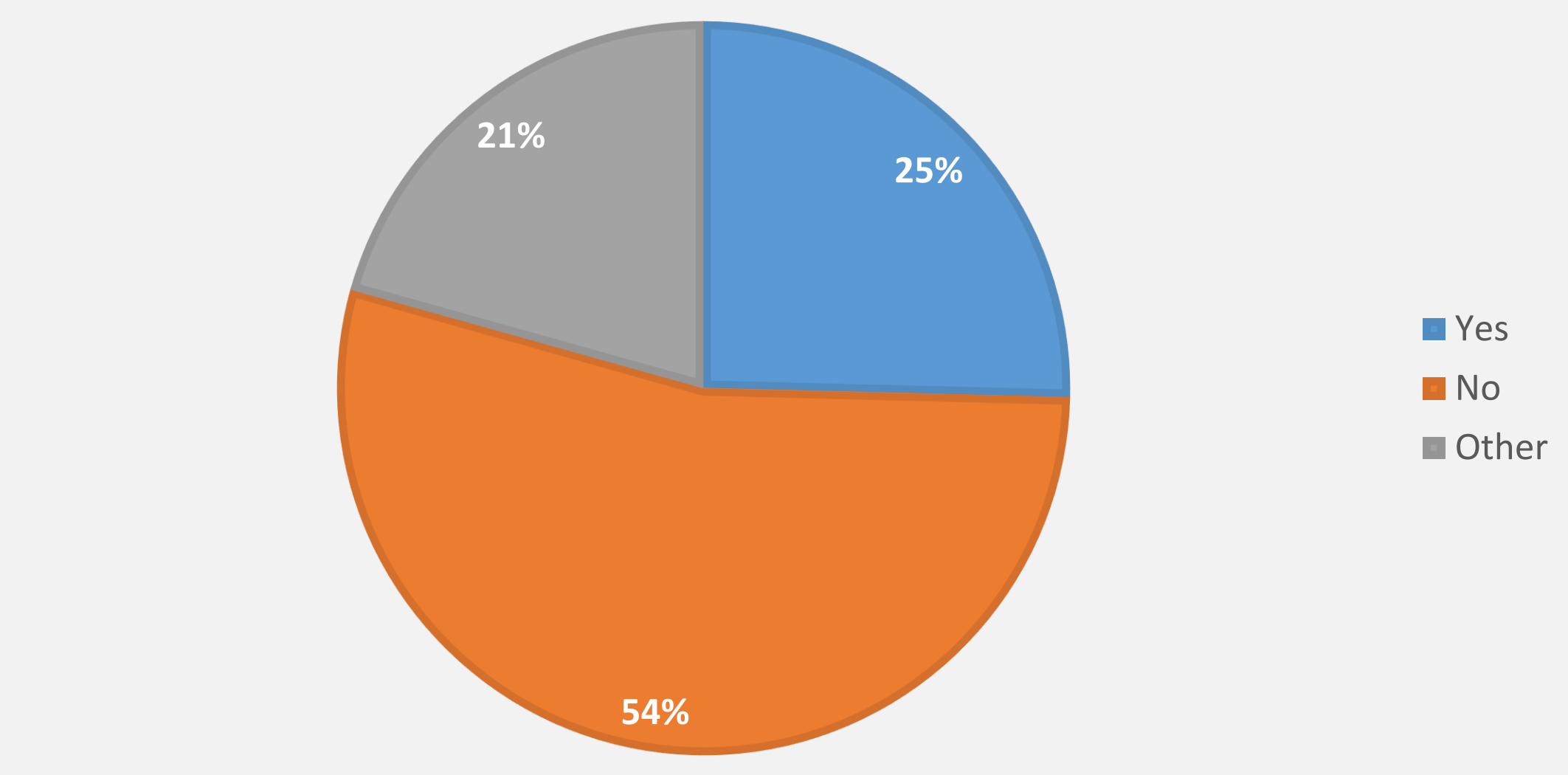
Node-to-Node Transfer (other than SLEIS)

Sample size = 62 Agencies

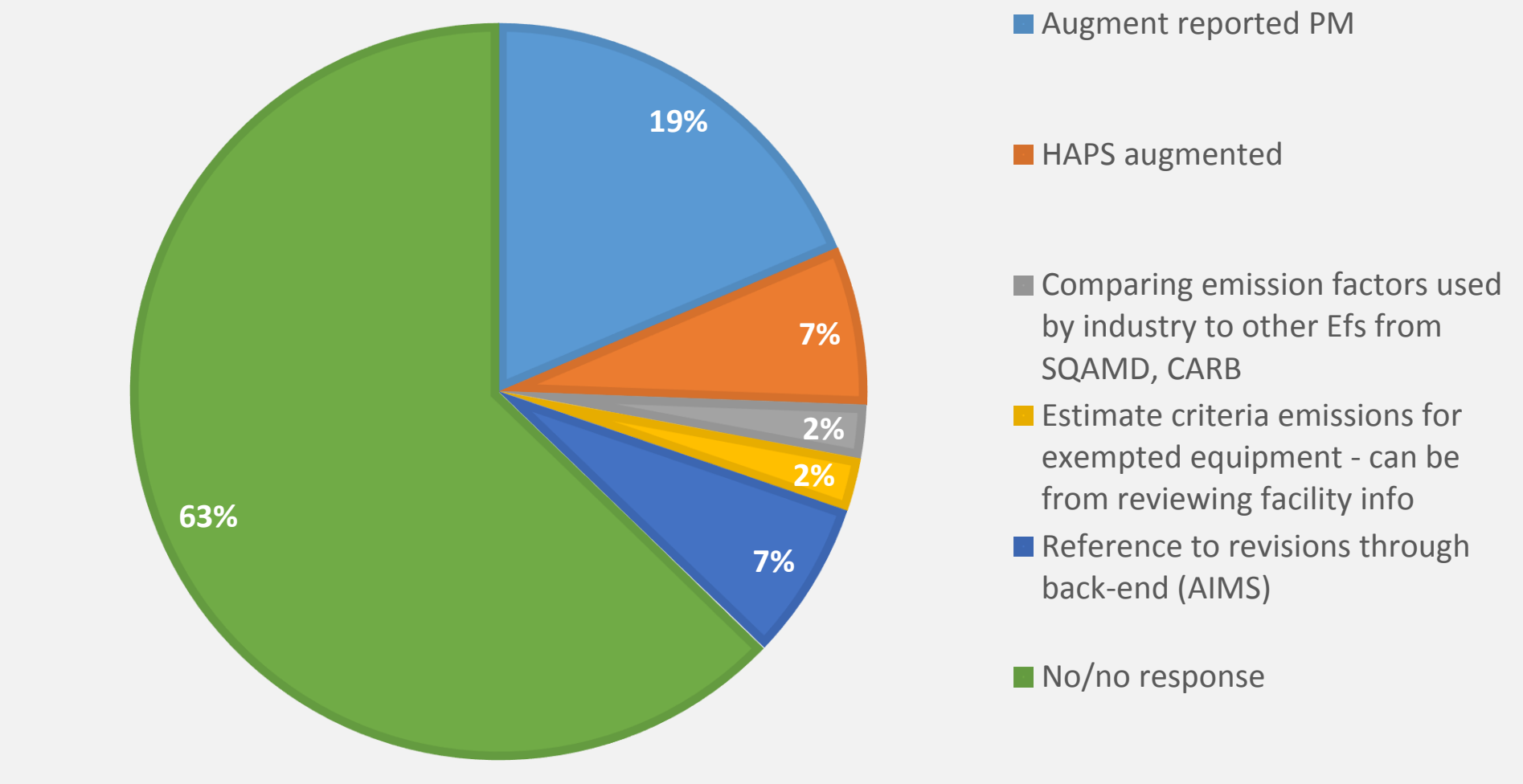
What software do you use to manage point source emission data?



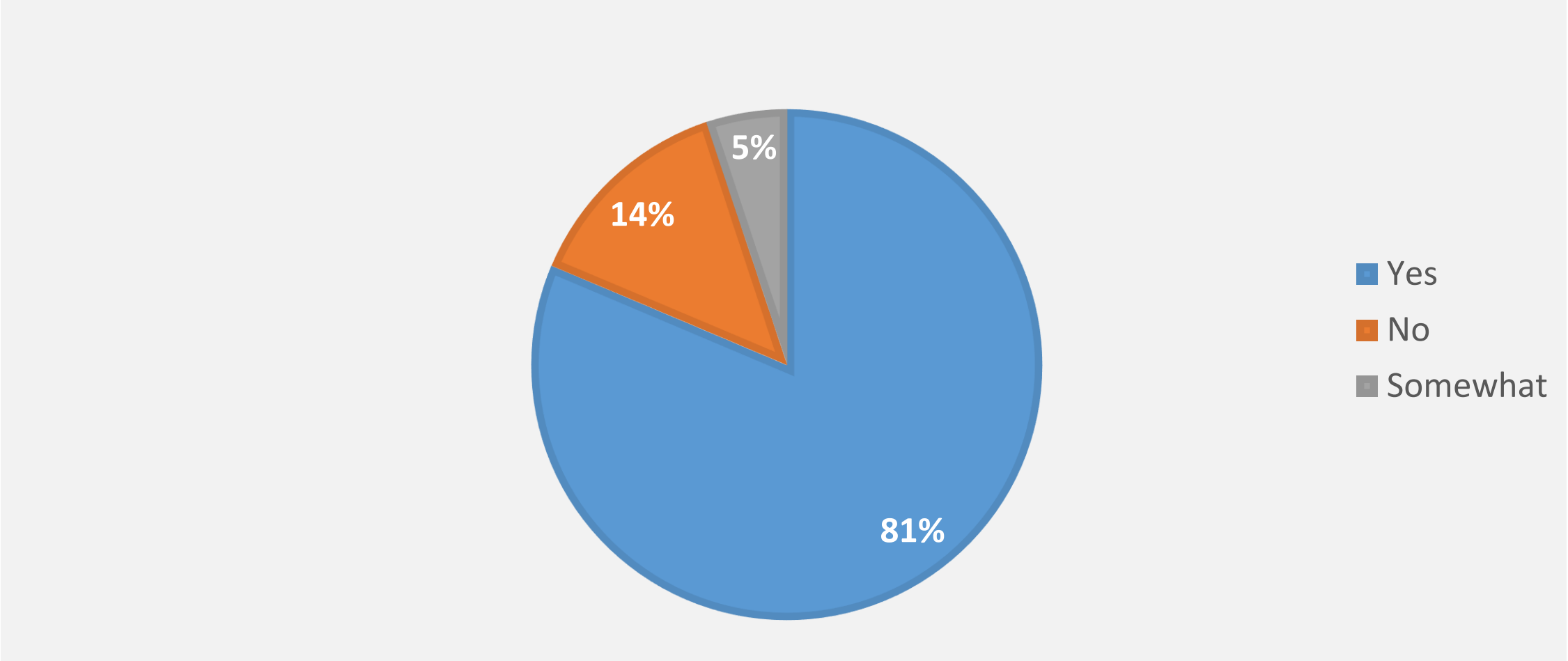
Is there any reason (regulation, office, policy, politics, etc.) why you cannot augment data received from industry?



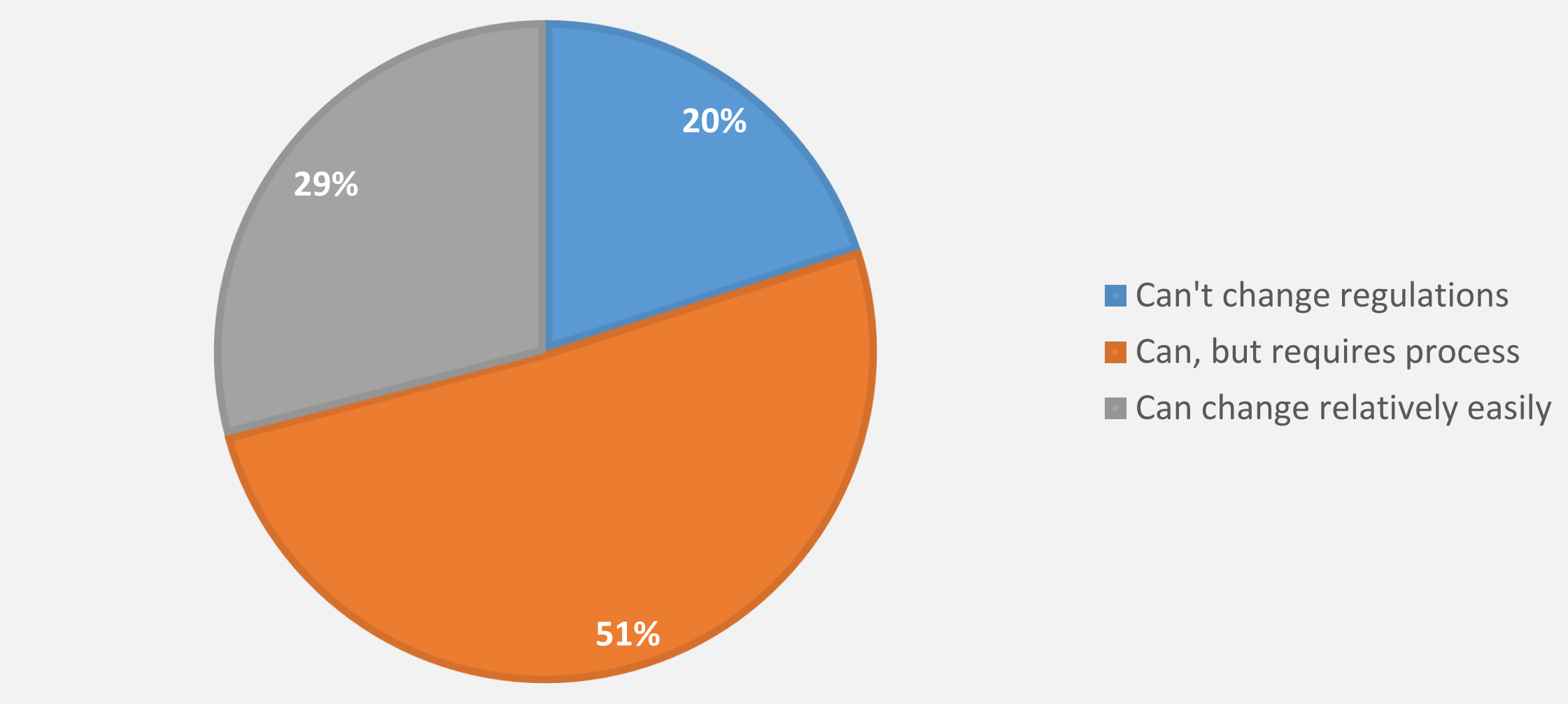
Do you augment data received from industry?



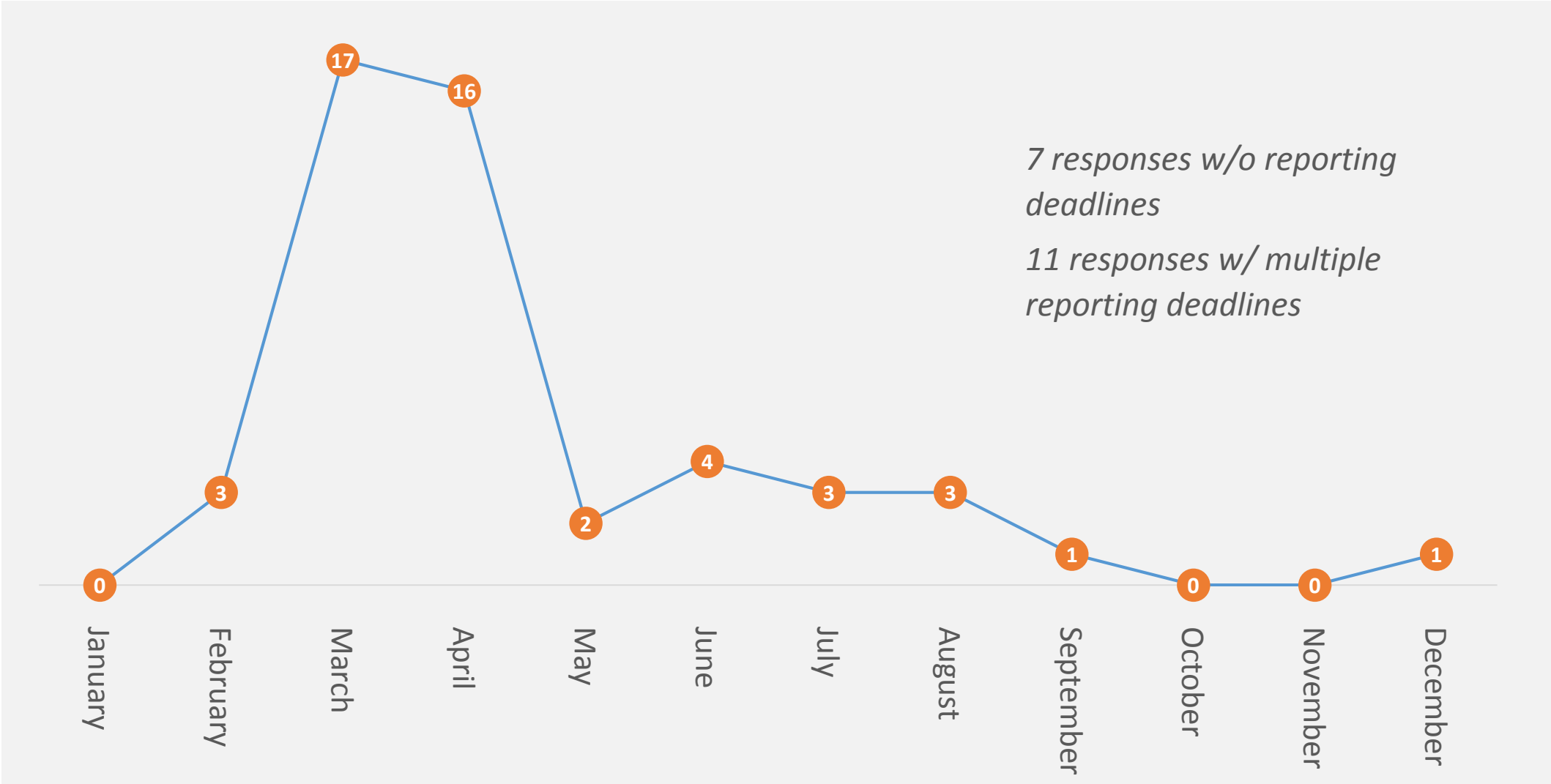
Is your reporting date mandated by Regulation?



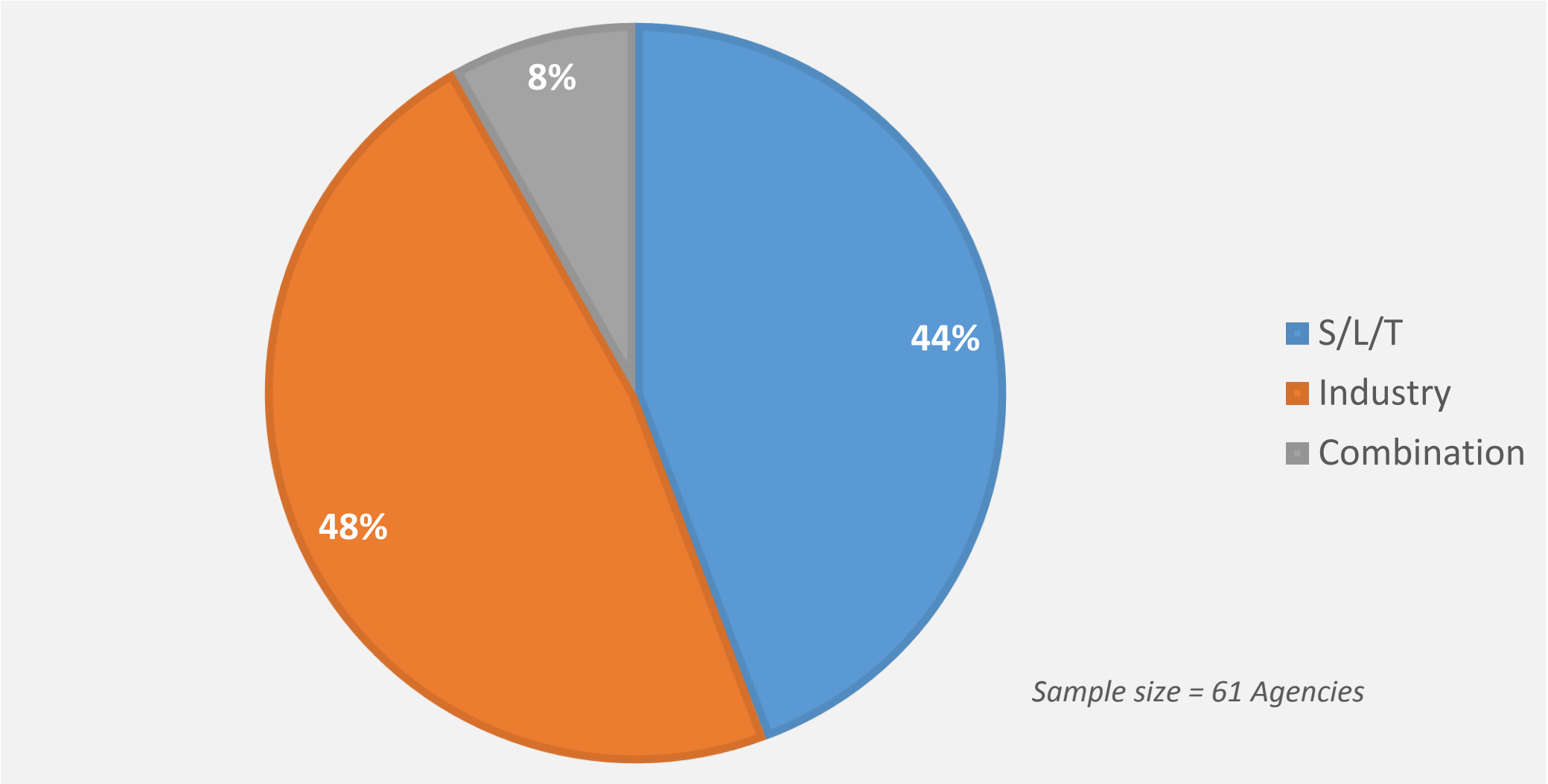
What is your ability to change regulations regarding reporting data?



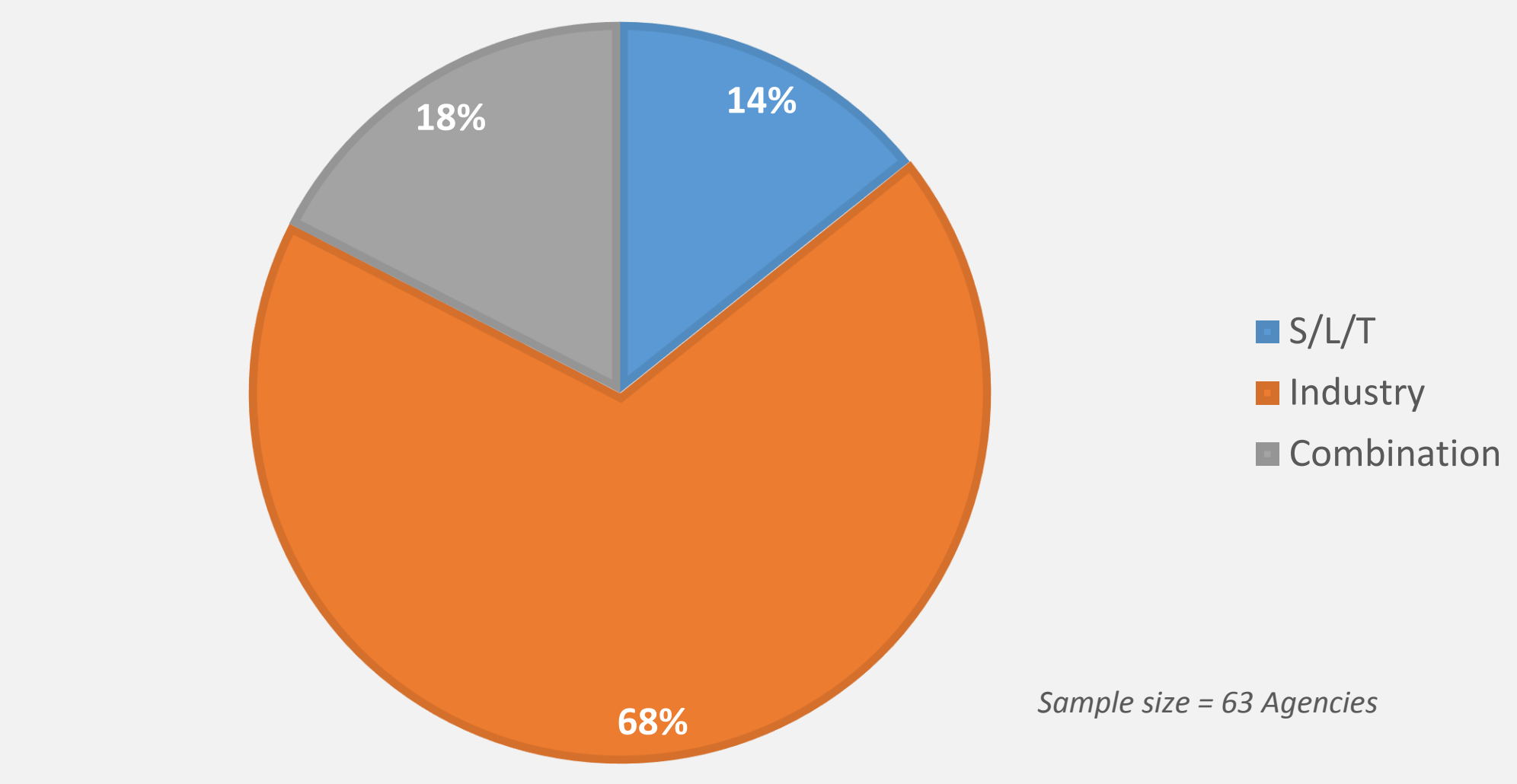
When is reporting required?



Who makes SCC assignments used in inventory?



Who calculates emissions used in inventory?



The what and why of augmentation

- Augmentation
  - Augment is to include additional data not already received by SLTs.
  - Augmentation does not change an SLT submitted value
  - Augmentation is based on SLT submitted PM, VOC, SO2 and Total Chrome
  - Filling gaps
- Why
  - To satisfy the various customers of our data.
    - National Scale Air Toxic Assessment
    - Air quality modeling
    - National Rule Assessments
    - International reporting
    - Rule development

Searching for solutions

- EPA presented an augmentation overview to SLTs team members
  - How the NEI is created through a selection hierarch of SLT and EPA datasets.
    - **EPA prefers to use SLT submitted data first**.
  - Review of the tools which EPA uses to calculate data to be augmented
    - PM Tool – available on the CHIEF website
    - HAP Tool – available in the Emission Inventory System
  - SLTs have the opportunity to comment on EPA augmented data.
  - Demonstrated how SLTs can identify augmented data in their review of the 2014 v1NEI by using the process level report and the data source name.

Immediate benefits

- SLTs had a better understanding of the PM requirements in the Air Emissions Reporting Requirement (AERR) with regard to PM
- SLTs understood that augmentation was not a replacement of SLT data but a gap filling of data not provided by the SLTs
- Tools could be helpful to SLTS to:
  - Augment their own data prior to submission to EPA
    - AZ used PM tool for 2014 and reduced augmentation by 6%, expects more as they understand the tool better.
    - Identified which facilities to concentrate on to obtain complete data
  - Understand how EPA calculated an augmented emission
- Training was important prior to the SLT comment period on how to identify augmented data and how to comment on that data.

Results

- Augmentation cannot be eliminated, but can be greatly reduced

- An expected pollutant list is a must
  - Will be available for 2017 submission period
  - Report to do comparison between expected pollutant and SLT submitted data

Results (cont'd)

EIS Facility	Facility Name	PSC	Agency Facility ID	EIS Unit ID	Agency Unit ID	EIS Process ID	Agency Process ID	SCC	Missing Pollutant Code	Pollutant Description
536011	Emory University	GADNR	08900233	4842713	924	4606914	1	10300601	110543	Hexane
536011	Emory University	GADNR	08900233	4842713	924	4606914	1	10300601	CO	Carbon Monoxide
536011	Emory University	GADNR	08900233	4842713	924	4606914	1	10300601	VOC	Volatile Organic Compounds
536011	Emory University	GADNR	08900233	4842713	924	46062014	2	10300501	CO	Carbon Monoxide

Continued Results

- Training
  - How to identify augmented data in the NEI
  - How to use the augmentation tools
  - How to correct or comment on augmentation data
- Webinars
  - Module 1 - Overview, data tagging, how to submit comments – June 7th
  - Module 2 – HAP Augmentation and Chromium Speciation – June 8th
  - Module 3 – PM and TRI Augmentation and Other EPA datasets – June 9th
  - Recordings will be posted to CHIEF and a notification sent when available.
  - Already seeing results from these webinars

Next Steps

- Expected pollutants list
  - Will work with team of EPA and SLTs representatives
  - Inform SLTs of what pollutants are expected
  - Inform SLTs of what pollutants will be augmented if not received
  - Use as a reference by facilities
  - Create a report in EIS on missing pollutants ✓
- PM Aug
  - Provide training on PM augmentation
    - Training given on June 9, 2016
  - Tool will undergo an update for 2017
  - Scope incorporating PM Aug tool into EIS ✓
- Project Documentation

✓ Projects funded by 20K

Questions?