NCC Spring 2022 State Reports on Sustainability and Concrete Materials

Wednesday, March 30, 2022

Powered by SurveyMonkey

38

Total Responses

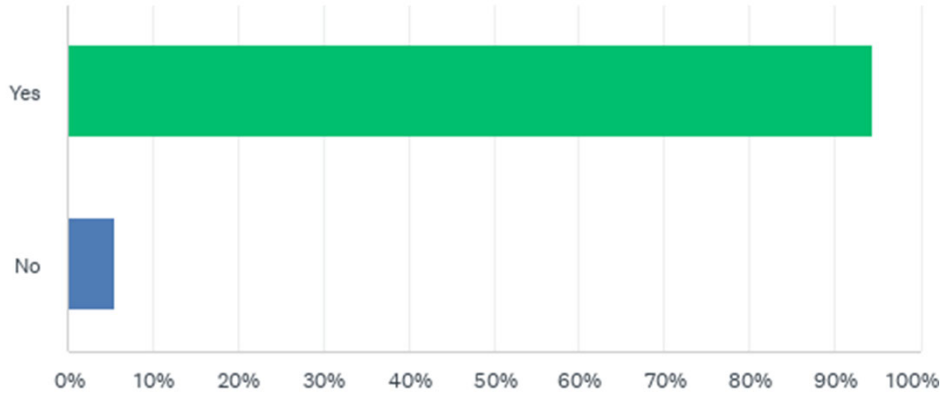
Date Created: Wednesday, March 09, 2022

Complete Responses: 38

Powered by SurveyMonkey

Q2: Do your concrete specifications currently allow Blended Cements (ASTM C595/AASHTO M205)?

Answered: 36 Skipped: 2



Powered by SurveyMonkey

Q2: Do your concrete specifications currently allow Blended Cements (ASTM C595/AASHTO M205)?

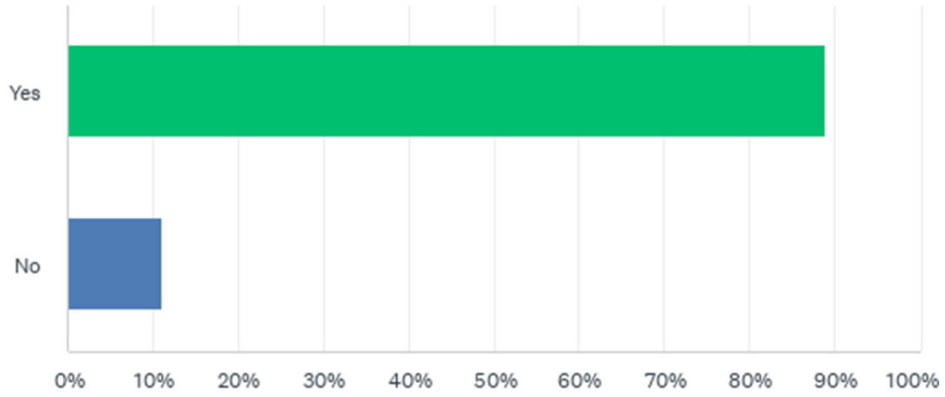
Answered: 36 Skipped: 2

ANSWER CHOICES	RESPONSES	
Yes	94.44%	34
No	5.56%	2
TOTAL		36

Powered by SurveyMonkey

Q3: Does your state consider Type IL cement as an equivalent replacement for ASTM C150 Type I or Type I/II Cement?

Answered: 36 Skipped: 2



Powered by SurveyMonkey

Q3: Does your state consider Type IL cement as an equivalent replacement for ASTM C150 Type I or Type I/II Cement?

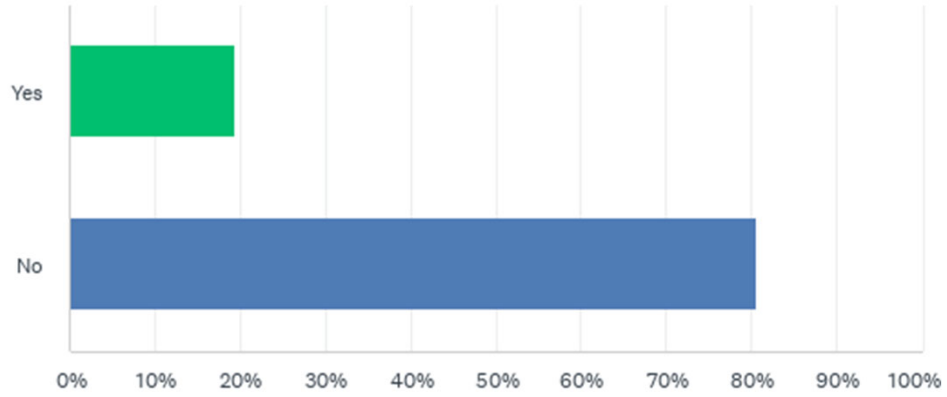
Answered: 36 Skipped: 2

ANSWER CHOICES	RESPONSES	
Yes	88.89%	32
No	11.11%	4
TOTAL		36

Powered by SurveyMonkey

Q4: Do your concrete specifications allow for the use of ASTM C1157 Cements?

Answered: 36 Skipped: 2



Powered by SurveyMonkey

Q4: Do your concrete specifications allow for the use of ASTM C1157 Cements?

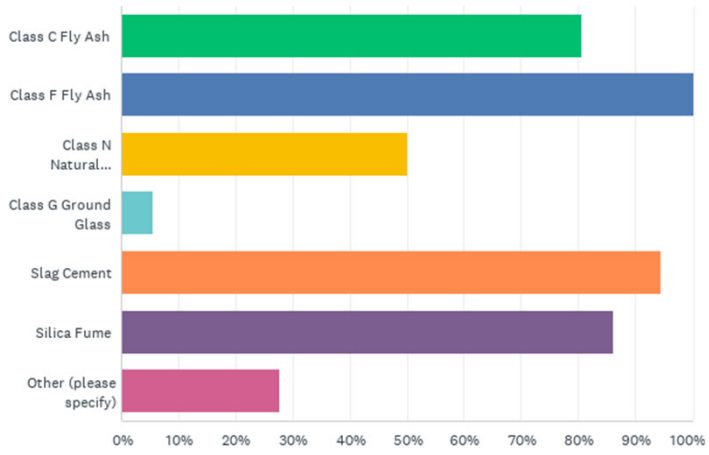
Answered: 36 Skipped: 2

ANSWER CHOICES	RESPONSES	
Yes	19.44%	7
No	80.56%	29
TOTAL		36

Powered by SurveyMonkey

Q5: What SCMs does your state currently allow for use? (Check all that apply)

Answered: 36 Skipped: 2



Powered by SurveyMonkey

Q5: What SCMs does your state currently allow for use? (Check all that apply)

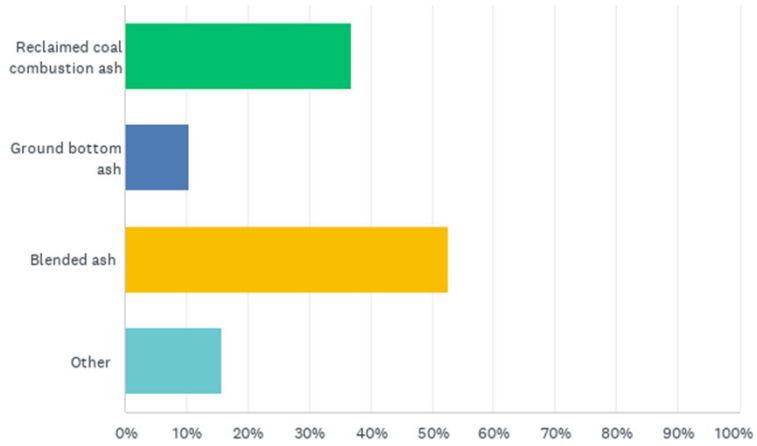
Answered: 36 Skipped: 2

ANSWER CHOICES	RESPONSES	
Class C Fly Ash	80.56%	29
Class F Fly Ash	100.00%	36
Class N Natural Pozzolans	50.00%	18
Class G Ground Glass	5.56%	2
Slag Cement	94.44%	34
Silica Fume	86.11%	31
Other (please specify)	27.78%	10
Total Respondents: 36		

Powered by SurveyMonkey

Q6: Do you allow/use any of the following alternative fly ashes? Check all that apply

Answered: 19 Skipped: 19



Powered by SurveyMonkey

Q6: Do you allow/use any of the following alternative fly ashes? Check all that apply

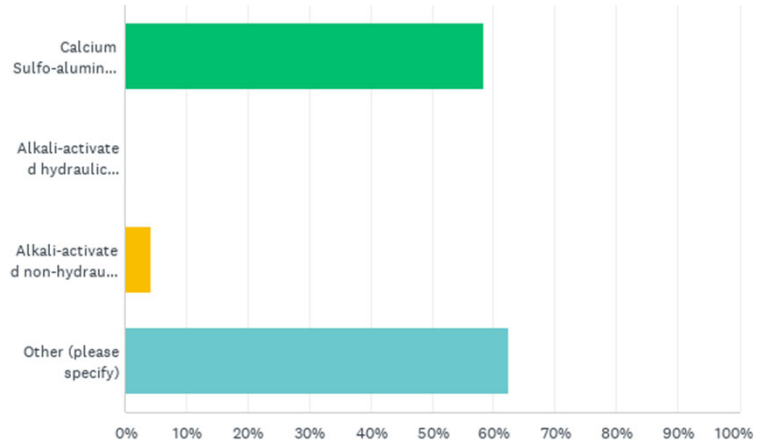
Answered: 19 Skipped: 19

ANSWER CHOICES	RESPONSES	
Reclaimed coal combustion ash	36.84%	7
Ground bottom ash	10.53%	2
Blended ash	52.63%	10
Other	15.79%	3
Total Respondents: 19		

Powered by SurveyMonkey

Q7: Does your state allow any of the following alternative cementitious materials (ACMs) that are not based on portland cement clinker for paving or structures? Check all that apply

Answered: 24 Skipped: 14



Powered by SurveyMonkey

Q7: Does your state allow any of the following alternative cementitious materials (ACMs) that are not based on portland cement clinker for paving or structures? Check all that apply

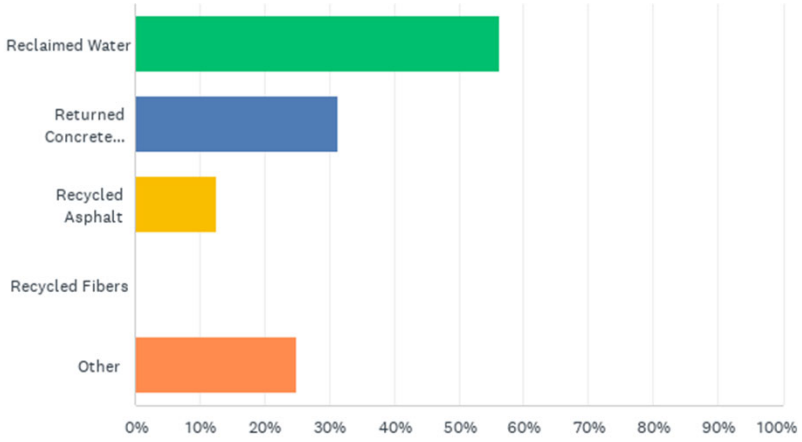
Answered: 24 Skipped: 14

ANSWER CHOICES	RESPONSES	
Calcium Sulfo-aluminate cement	58.33%	14
Alkali-activated hydraulic cement	0.00%	0
Alkali-activated non-hydraulic cement (geopolymers)	4.17%	1
Other (please specify)	62.50%	15
Total Respondents: 24		

Powered by SurveyMonkey

Q8: Besides the materials previously mentioned, does your state allow any other recycled materials in concrete? Check all that apply.

Answered: 16 Skipped: 22



Powered by SurveyMonkey

Q8: Besides the materials previously mentioned, does your state allow any other recycled materials in concrete? Check all that apply.

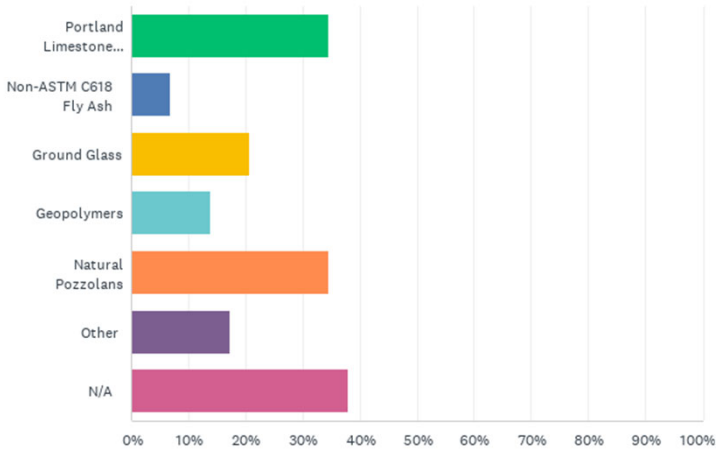
Answered: 16 Skipped: 22

ANSWER CHOICES	RESPONSES	
Reclaimed Water	56.25%	9
Returned Concrete Aggregate (waste concrete returned at ready-mix plant)	31.25%	5
Recycled Asphalt	12.50%	2
Recycled Fibers	0.00%	0
Other	25.00%	4
Total Respondents: 16		

Powered by SurveyMonkey

Q9: Does your Agency have any research either in progress or complete on any of the following materials? Check all that apply.

Answered: 29 Skipped: 9



Powered by SurveyMonkey

Q9: Does your Agency have any research either in progress or complete on any of the following materials? Check all that apply.

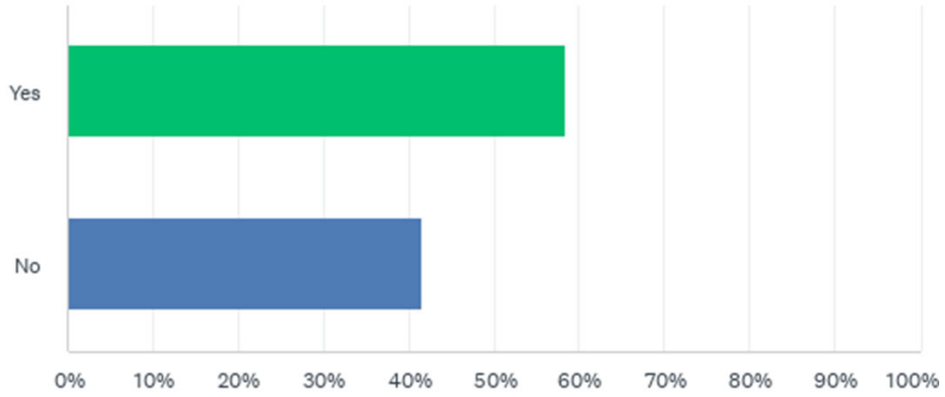
Answered: 29 Skipped: 9

ANSWER CHOICES	RESPONSES	
Portland Limestone Cements	34.48%	10
Non-ASTM C618 Fly Ash	6.90%	2
Ground Glass	20.69%	6
Geopolymers	13.79%	4
Natural Pozzolans	34.48%	10
Other	17.24%	5
N/A	37.93%	11
Total Respondents: 29		

Powered by SurveyMonkey

Q10: Are you experiencing any cement or supplementary cementitious material shortages?

Answered: 36 Skipped: 2



Powered by SurveyMonkey

Q10: Are you experiencing any cement or supplementary cementitious material shortages?

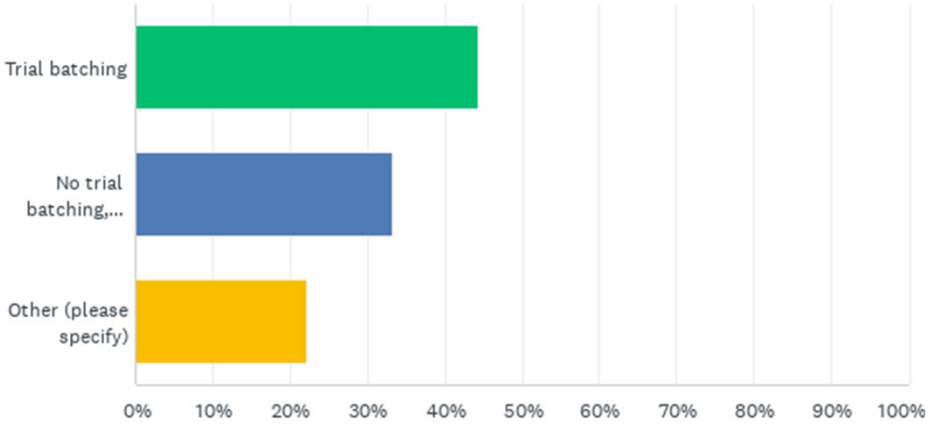
Answered: 36 Skipped: 2

ANSWER CHOICES	RESPONSES	
Yes	58.33%	21
No	41.67%	15
TOTAL		36

Powered by SurveyMonkey

Q11: What is your state requiring of mix designs that are switching to Type IL(10) cement?

Answered: 36 Skipped: 2



Powered by SurveyMonkey

Q11: What is your state requiring of mix designs that are switching to Type IL(10) cement?

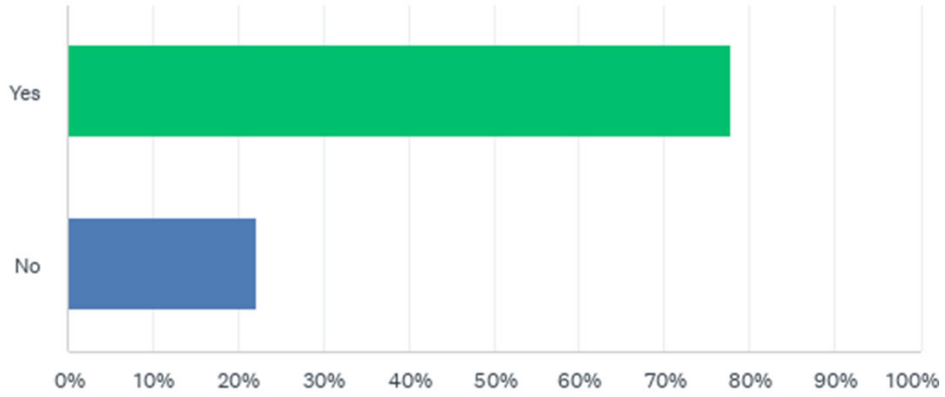
Answered: 36 Skipped: 2

ANSWER CHOICES	RESPONSES	
Trial batching	44.44%	16
No trial batching, re-submittal of mix design only	33.33%	12
Other (please specify)	22.22%	8
TOTAL		36

Powered by SurveyMonkey

Q12: Do you have a minimum total cement and/or cementitious material content for pavements?

Answered: 36 Skipped: 2



Powered by SurveyMonkey

Q12: Do you have a minimum total cement and/or cementitious material content for pavements?

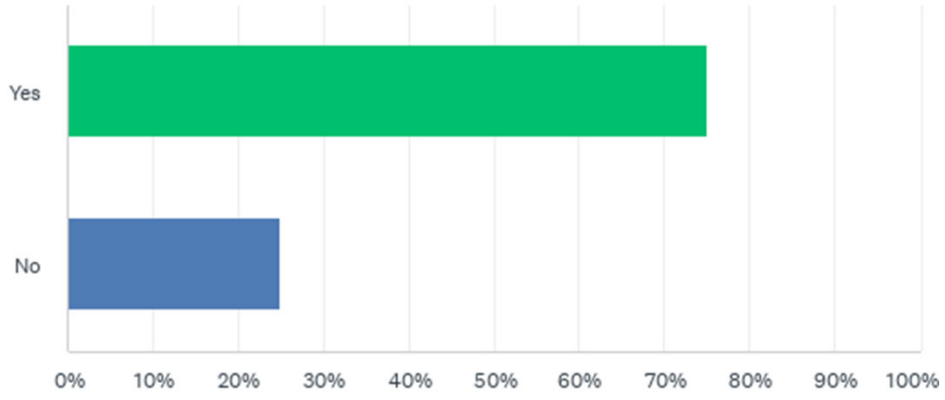
Answered: 36 Skipped: 2

ANSWER CHOICES	RESPONSES	
Yes	77.78%	28
No	22.22%	8
TOTAL		36

Powered by SurveyMonkey

Q13: Do you have a minimum total cement and/or cementitious material content for structures?

Answered: 36 Skipped: 2



Powered by SurveyMonkey

Q13: Do you have a minimum total cement and/or cementitious material content for structures?

Answered: 36 Skipped: 2

ANSWER CHOICES	RESPONSES	
Yes	75.00%	27
No	25.00%	9
TOTAL		36

Powered by SurveyMonkey

Q14: What are the allowable replacement limits (minimum and/or maximum) for SCMs in your state?

Pozzolan	Typical Range
Class C Fly Ash	15 to 30%[1]
Class F Fly Ash	15 to 30%[1]
Class N Natural Pozzolan	20 to 50%
Slag Cement	20 to 50%, 50 to 70%[2]
Micro Silica	4 to 12%
Other:	
Carbonate Micro-fines	20%
Metakaolin	5 to 15%
Ternary Blend	35% max[1]

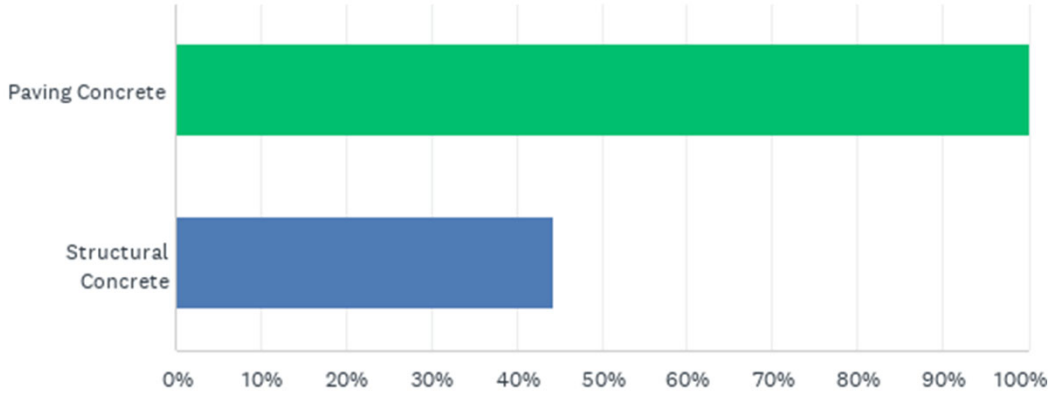
[1] Three state mention up to 50%

[2] One state mentioned this range

Powered by SurveyMonkey

Q15: Do you require an optimized aggregate grading for either of the following? Check all that apply.

Answered: 18 Skipped: 20



Powered by SurveyMonkey

Q15: Do you require an optimized aggregate grading for either of the following? Check all that apply.

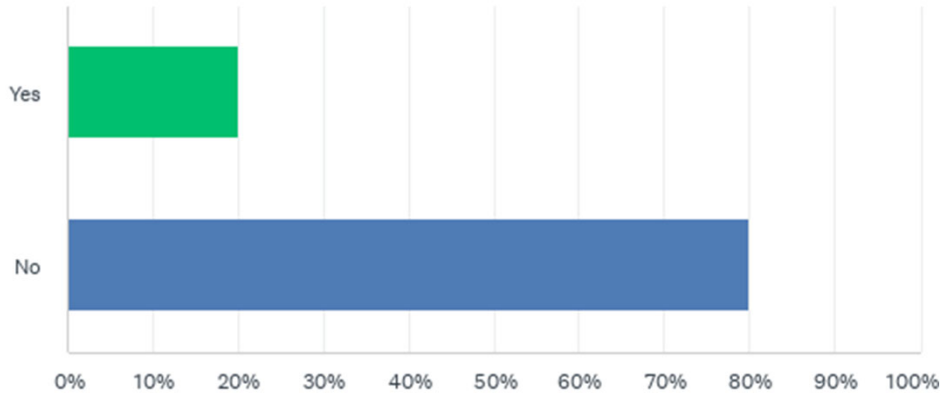
Answered: 18 Skipped: 20

ANSWER CHOICES	RESPONSES	
Paving Concrete	100.00%	18
Structural Concrete	44.44%	8
Total Respondents: 18		

Powered by SurveyMonkey

Q16: Does your state currently have climate change legislation in place that impacts the DOT?

Answered: 35 Skipped: 3



Powered by SurveyMonkey

Q16: Does your state currently have climate change legislation in place that impacts the DOT?

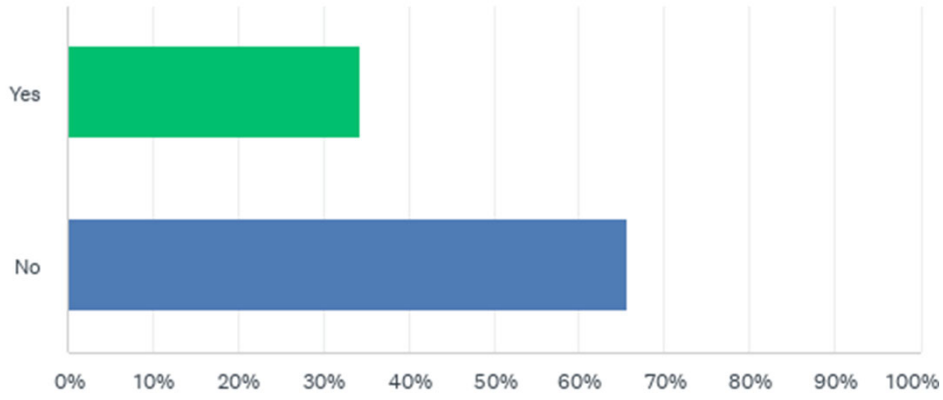
Answered: 35 Skipped: 3

ANSWER CHOICES	RESPONSES	
Yes	20.00%	7
No	80.00%	28
TOTAL		35

Powered by SurveyMonkey

Q17: Do you anticipate additional state legislation to combat climate change in the next 5 years?

Answered: 35 Skipped: 3



Powered by SurveyMonkey

Q17: Do you anticipate additional state legislation to combat climate change in the next 5 years?

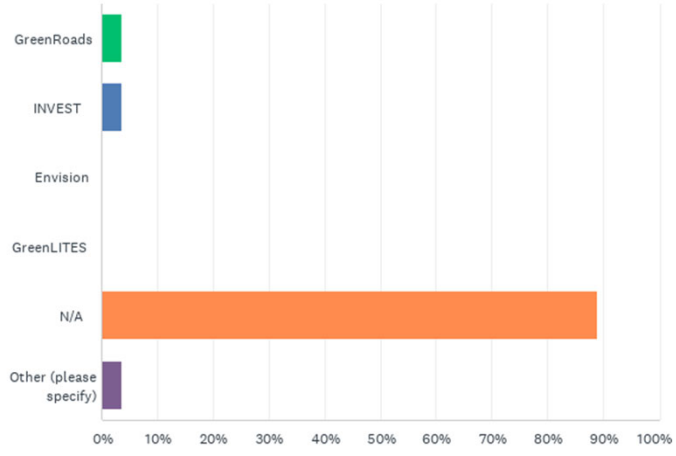
Answered: 35 Skipped: 3

ANSWER CHOICES	RESPONSES	
Yes	34.29%	12
No	65.71%	23
TOTAL		35

Powered by SurveyMonkey

Q18: Does your state utilize any of the following sustainability rating systems for paving projects? Select all that apply.

Answered: 27 Skipped: 11



Powered by SurveyMonkey

Q18: Does your state utilize any of the following sustainability rating systems for paving projects? Select all that apply.

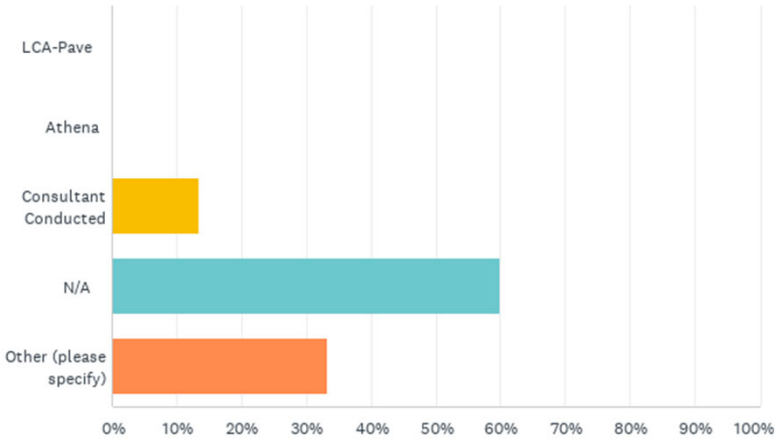
Answered: 27 Skipped: 11

ANSWER CHOICES	RESPONSES	
GreenRoads	3.70%	1
INVEST	3.70%	1
Envision	0.00%	0
GreenLITES	0.00%	0
N/A	88.89%	24
Other (please specify)	3.70%	1
Total Respondents: 27		

Powered by SurveyMonkey

Q19: Does your state utilize any of the following pavement lifecycle assessment tools? Check all that apply.

Answered: 30 Skipped: 8



Powered by SurveyMonkey

Q19: Does your state utilize any of the following pavement lifecycle assessment tools? Check all that apply.

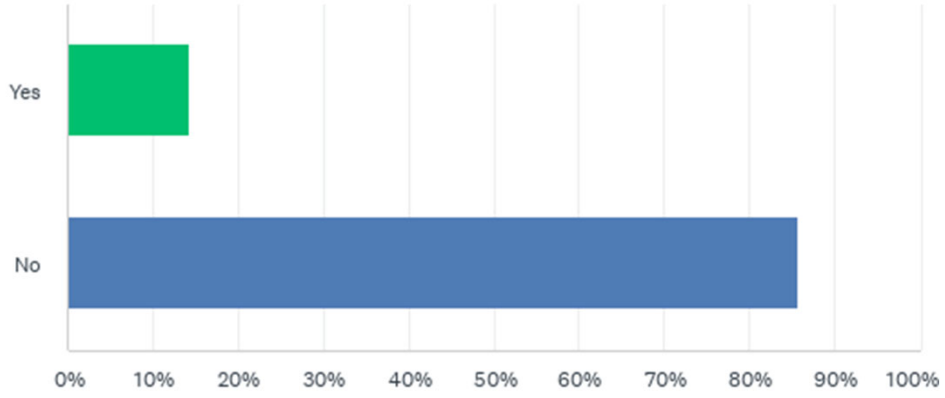
Answered: 30 Skipped: 8

ANSWER CHOICES	RESPONSES	
LCA-Pave	0.00%	0
Athena	0.00%	0
Consultant Conducted	13.33%	4
N/A	60.00%	18
Other (please specify)	33.33%	10
Total Respondents: 30		

Powered by SurveyMonkey

Q20: Does your state currently have legislation that requires environmental product declarations (EPDs) submittals for state funded projects?

Answered: 35 Skipped: 3



Powered by SurveyMonkey

Q20: Does your state currently have legislation that requires environmental product declarations (EPDs) submittals for state funded projects?

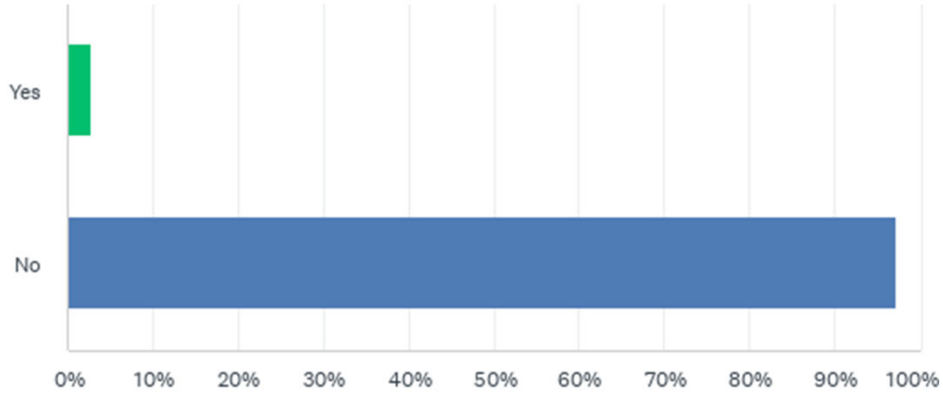
Answered: 35 Skipped: 3

ANSWER CHOICES	RESPONSES	
Yes	14.29%	5
No	85.71%	30
TOTAL		35

Powered by SurveyMonkey

Q21: Have concrete suppliers submitted EPDs as part of a mix design submittal?

Answered: 35 Skipped: 3



Powered by SurveyMonkey

Q21: Have concrete suppliers submitted EPDs as part of a mix design submittal?

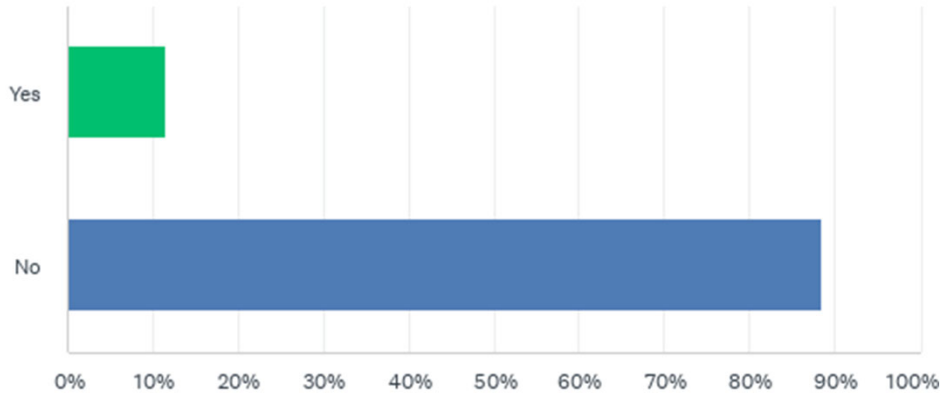
Answered: 35 Skipped: 3

ANSWER CHOICES	RESPONSES	
Yes	2.86%	1
No	97.14%	34
TOTAL		35

Powered by SurveyMonkey

Q22: Does your state currently allow/require the use of carbon sequestration products?

Answered: 35 Skipped: 3



Powered by SurveyMonkey

Q22: Does your state currently allow/require the use of carbon sequestration products?

Answered: 35 Skipped: 3

ANSWER CHOICES	RESPONSES	
Yes	11.43%	4
No	88.57%	31
TOTAL		35

Powered by SurveyMonkey