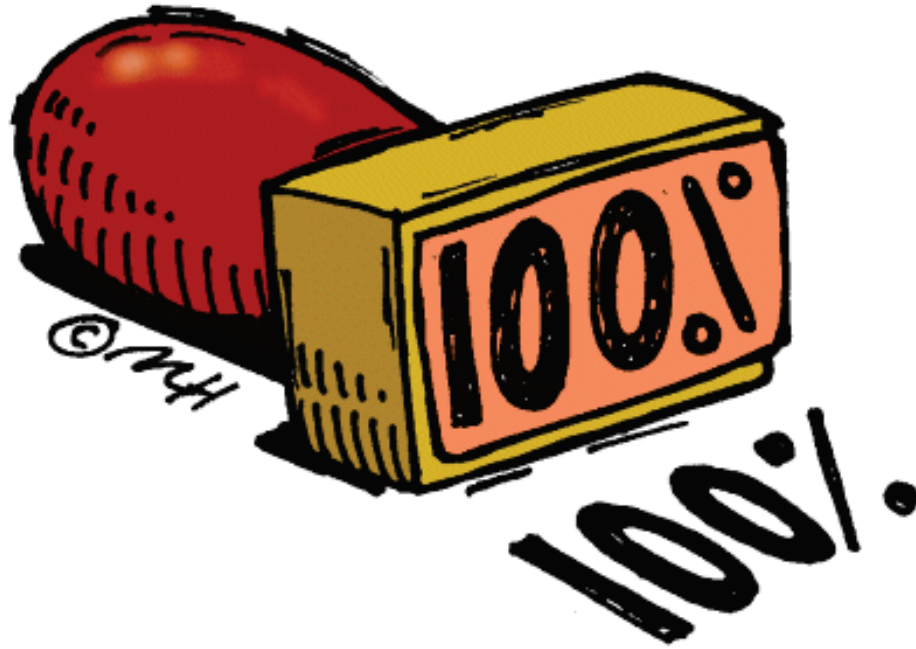


NCC State Reports Fall 2015 - Joints Survey

Saturday, September 05, 2015



31

Total Responses

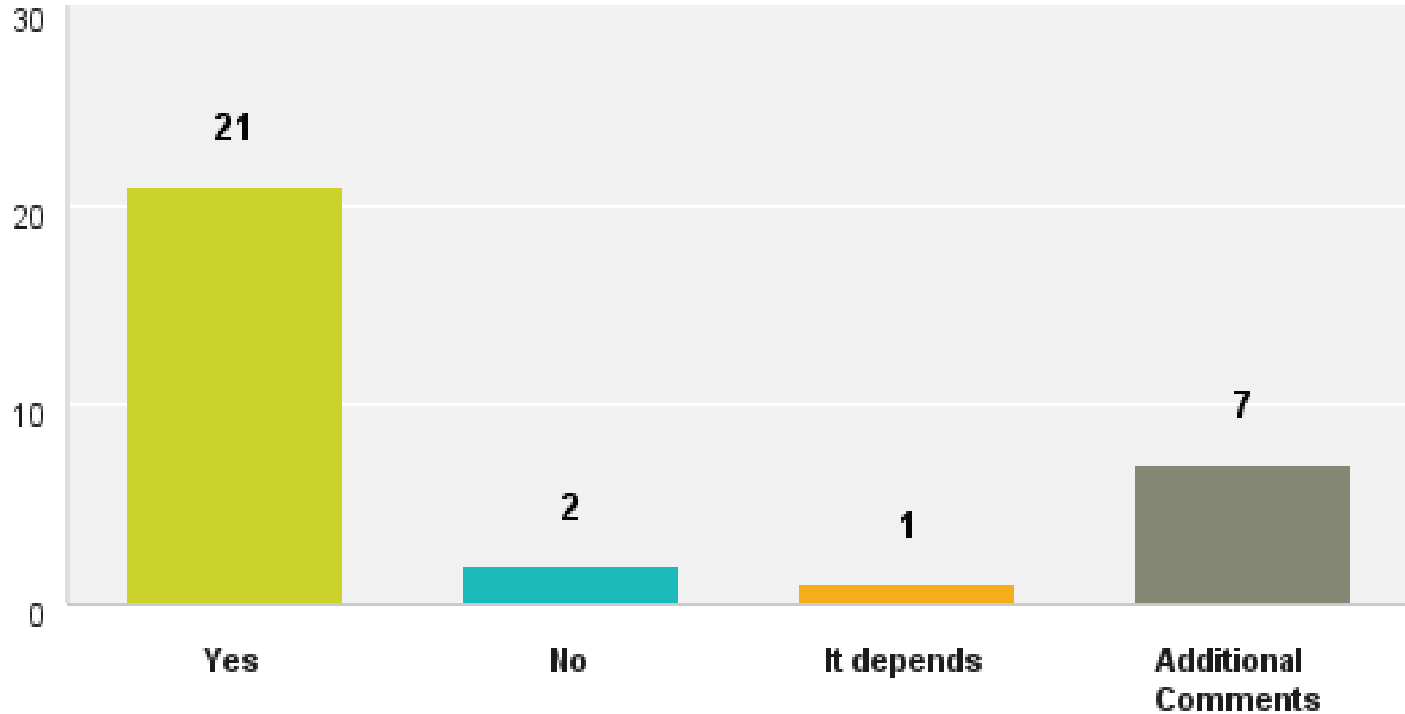
Date Created: Sunday, July 19, 2015

Complete Responses: 31

Refer to the NC2 website for each DOT's response

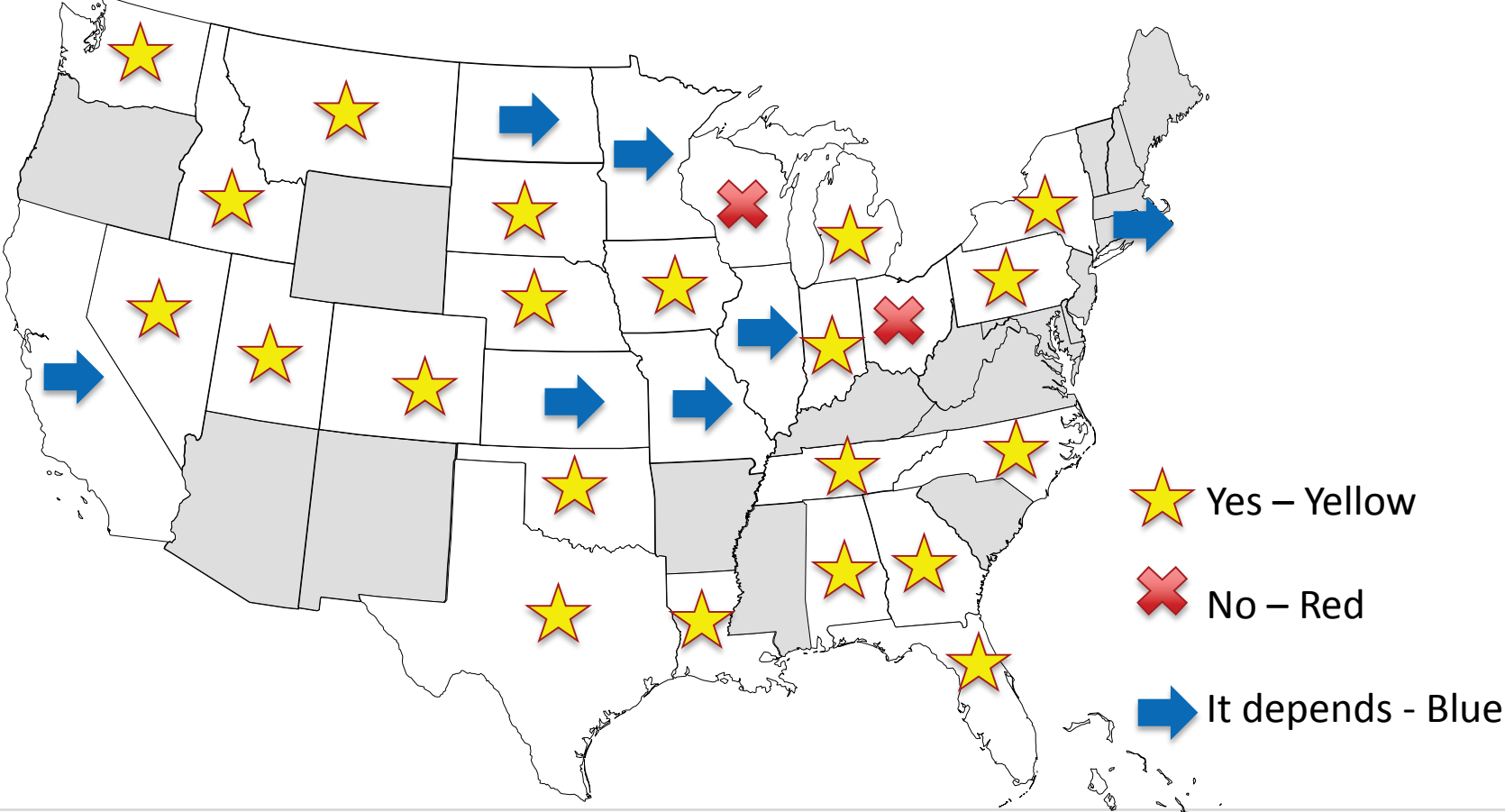
Q2: Do you require joint sealing?

Answered: 31 Skipped: 0



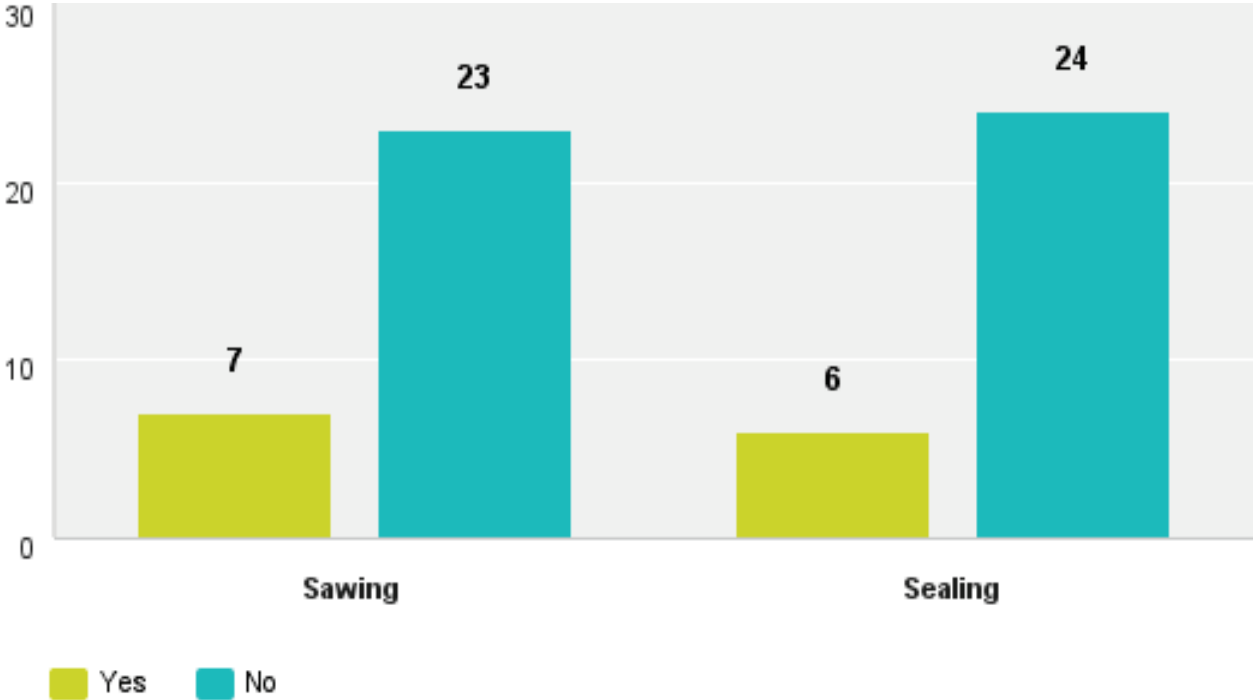
Q2: Do you require joint sealing?

Answered: 31 Skipped: 0



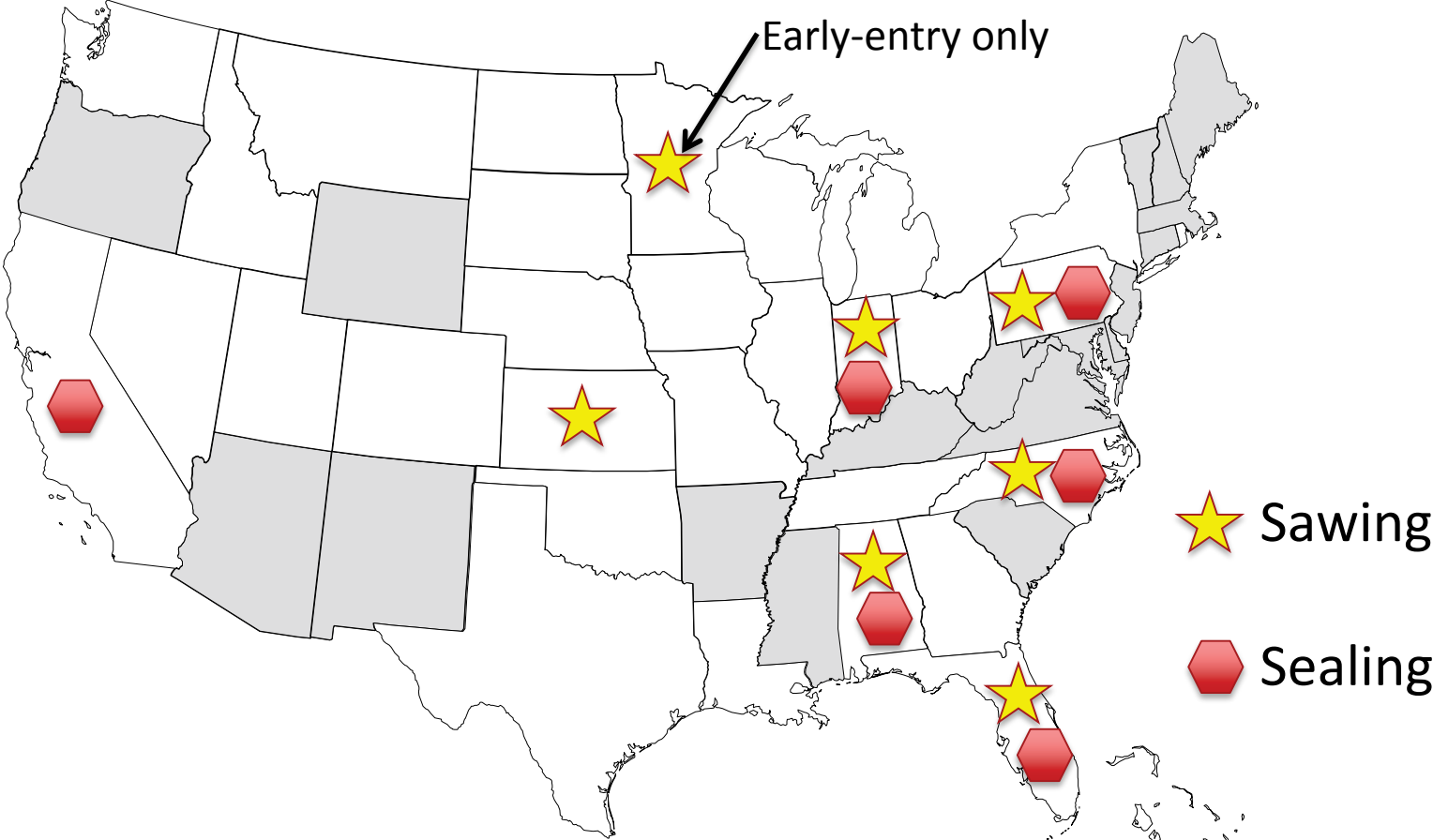
Q3: Do you require Quality Control plans for the following?

Answered: 30 Skipped: 1



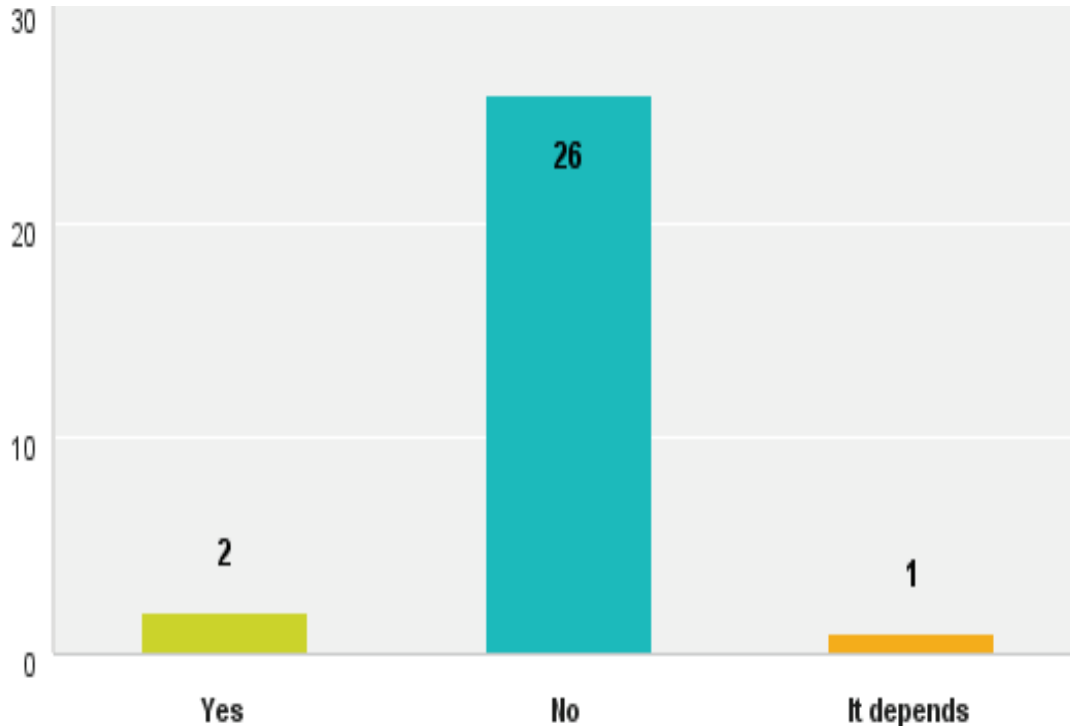
Q3: Do you require Quality Control plans for the following?

Answered: 30 Skipped: 1



Q4: Do you require any software (ie. HiperPav) or other methods for predicting time to sawing? When does Contractor submit? How often is it verified? Who checks?

Answered: 29 Skipped: 2



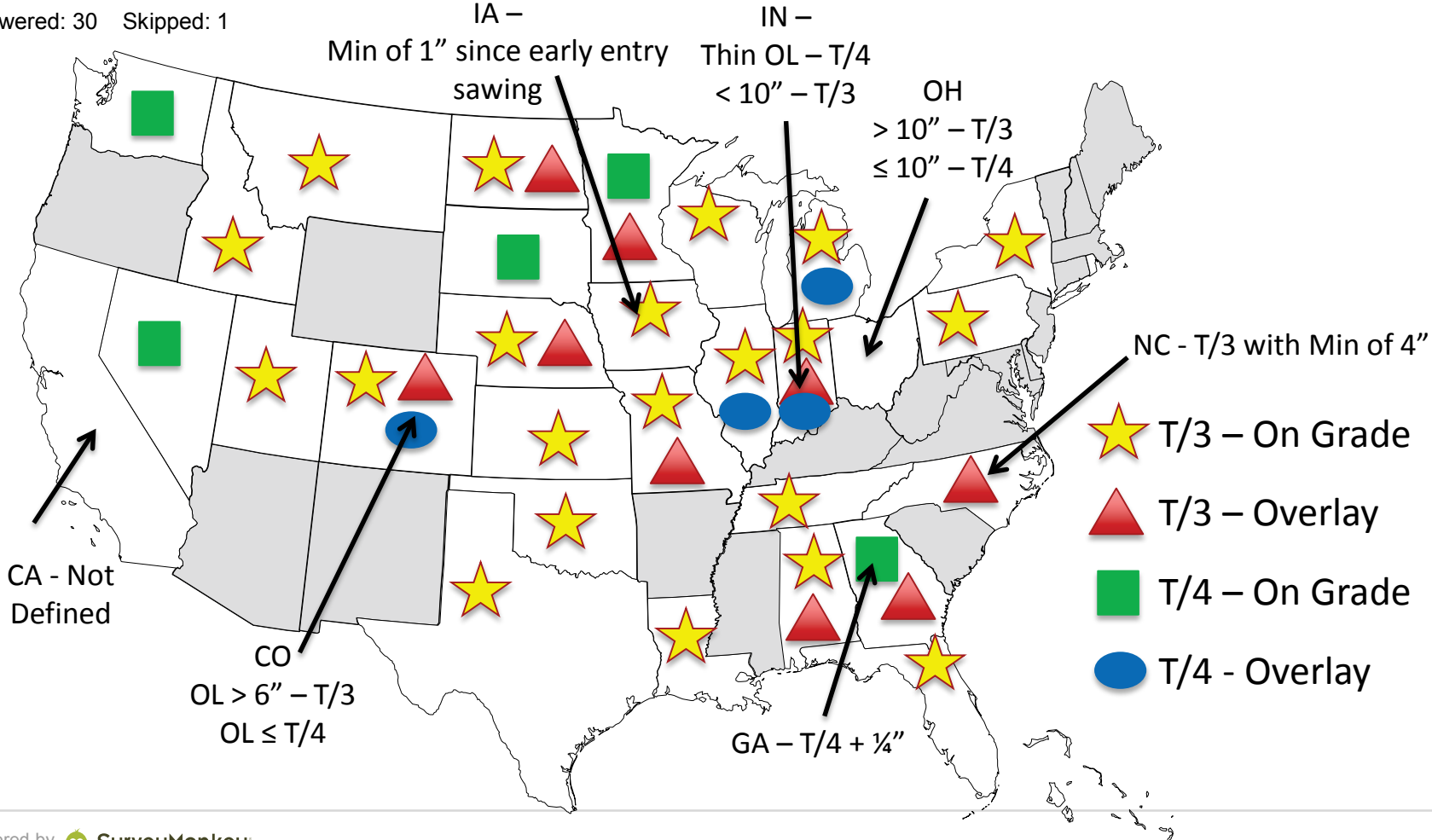
Ohio – HiperPav, Contractor submits prior to placement, verified daily by Project Engineer

North Carolina – Maturity and HiperPav optional, Contractor submits with process control plan, Resident Engineer or appointee verifies at random intervals during construction

Wisconsin – It Depends ~ HiperPav

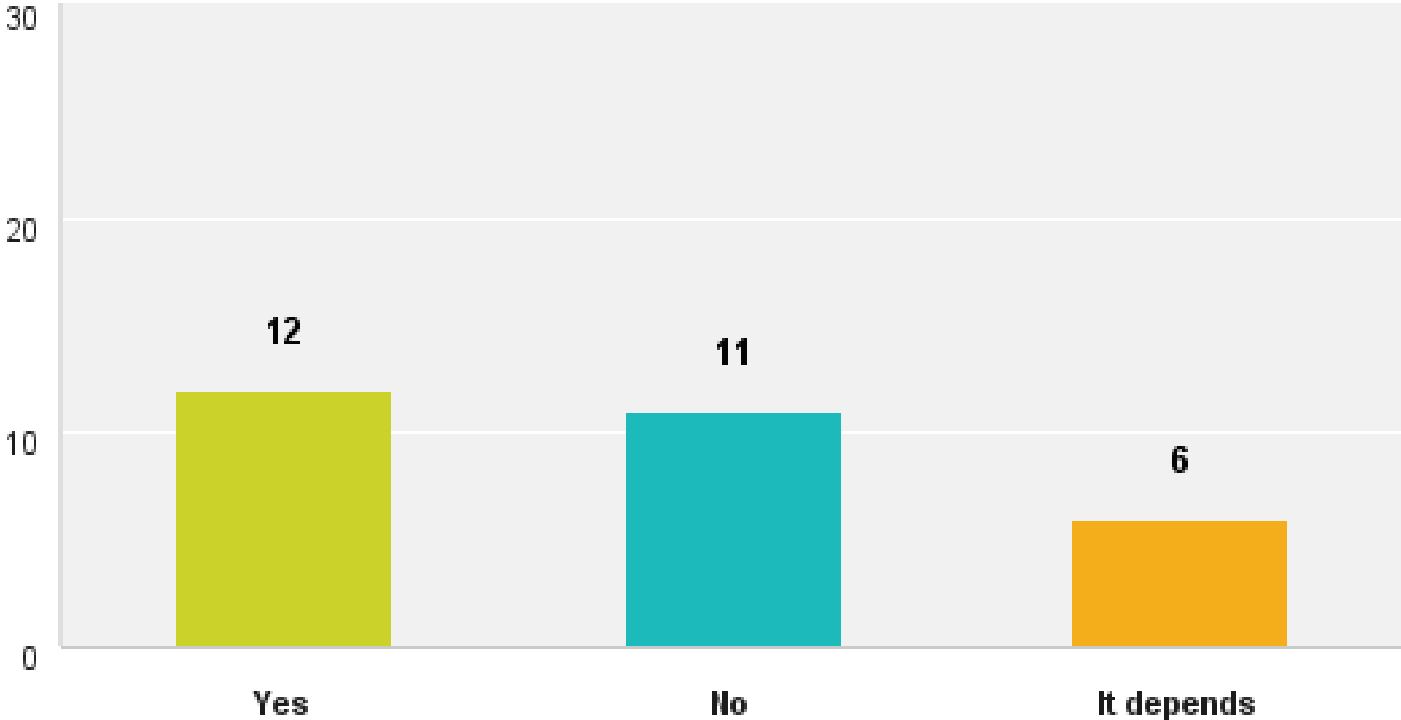
Q6: What is the minimum saw cut depth requirement? Transverse...

Answered: 30 Skipped: 1



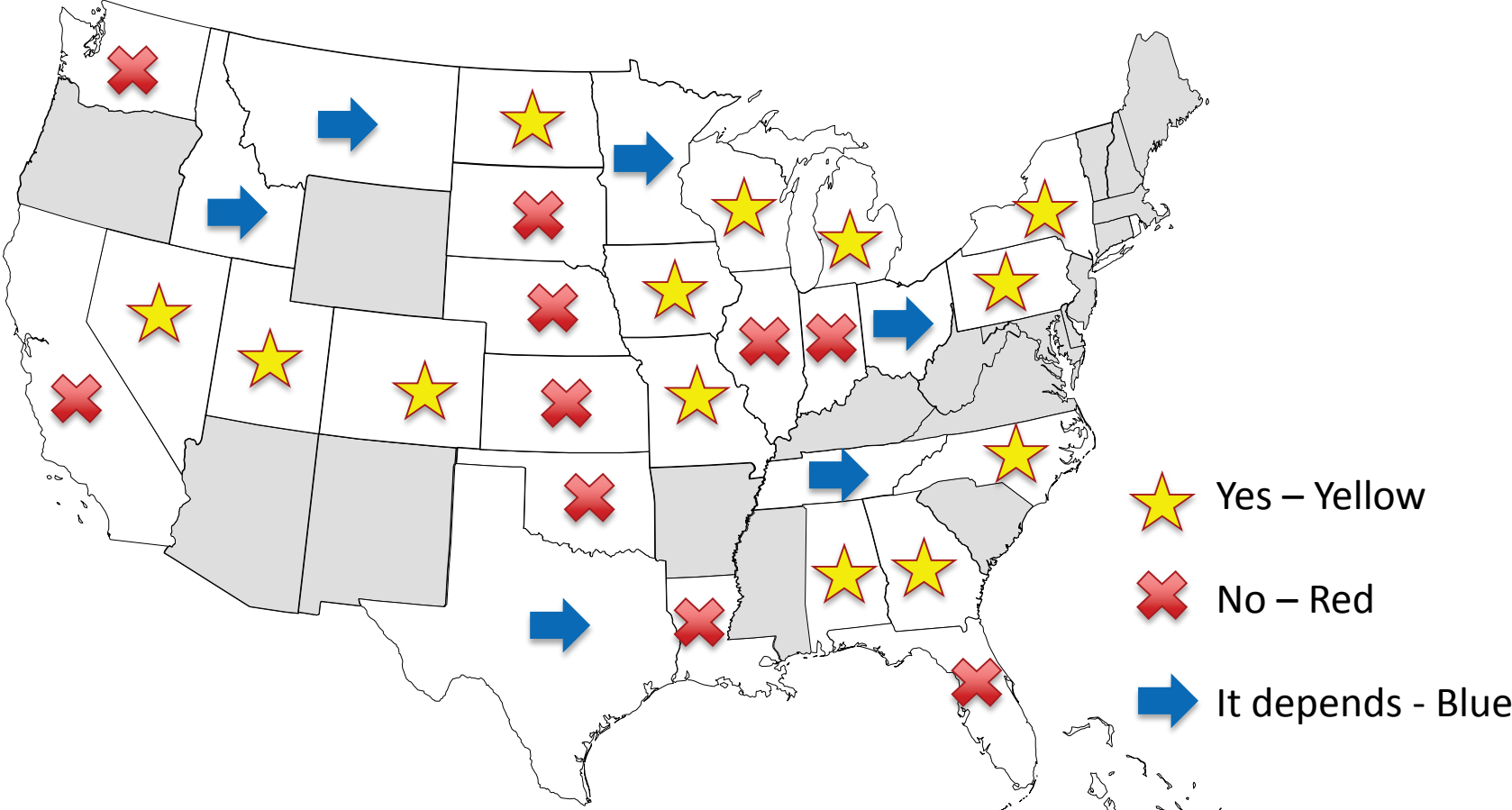
Q7: Do you routinely check sawcut depths?

Answered: 29 Skipped: 2

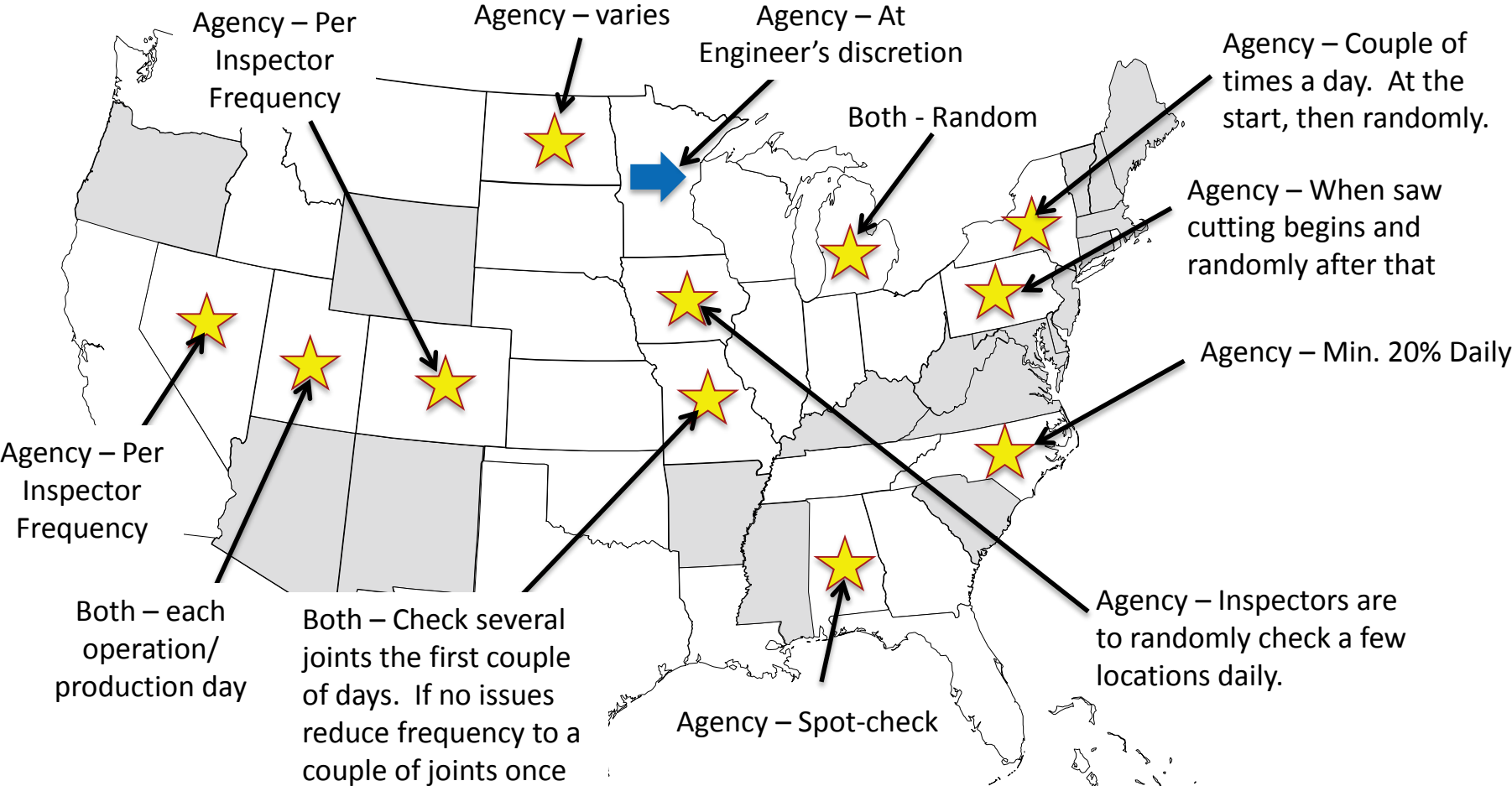


Q7: Do you routinely check sawcut depths?

Answered: 29 Skipped: 2



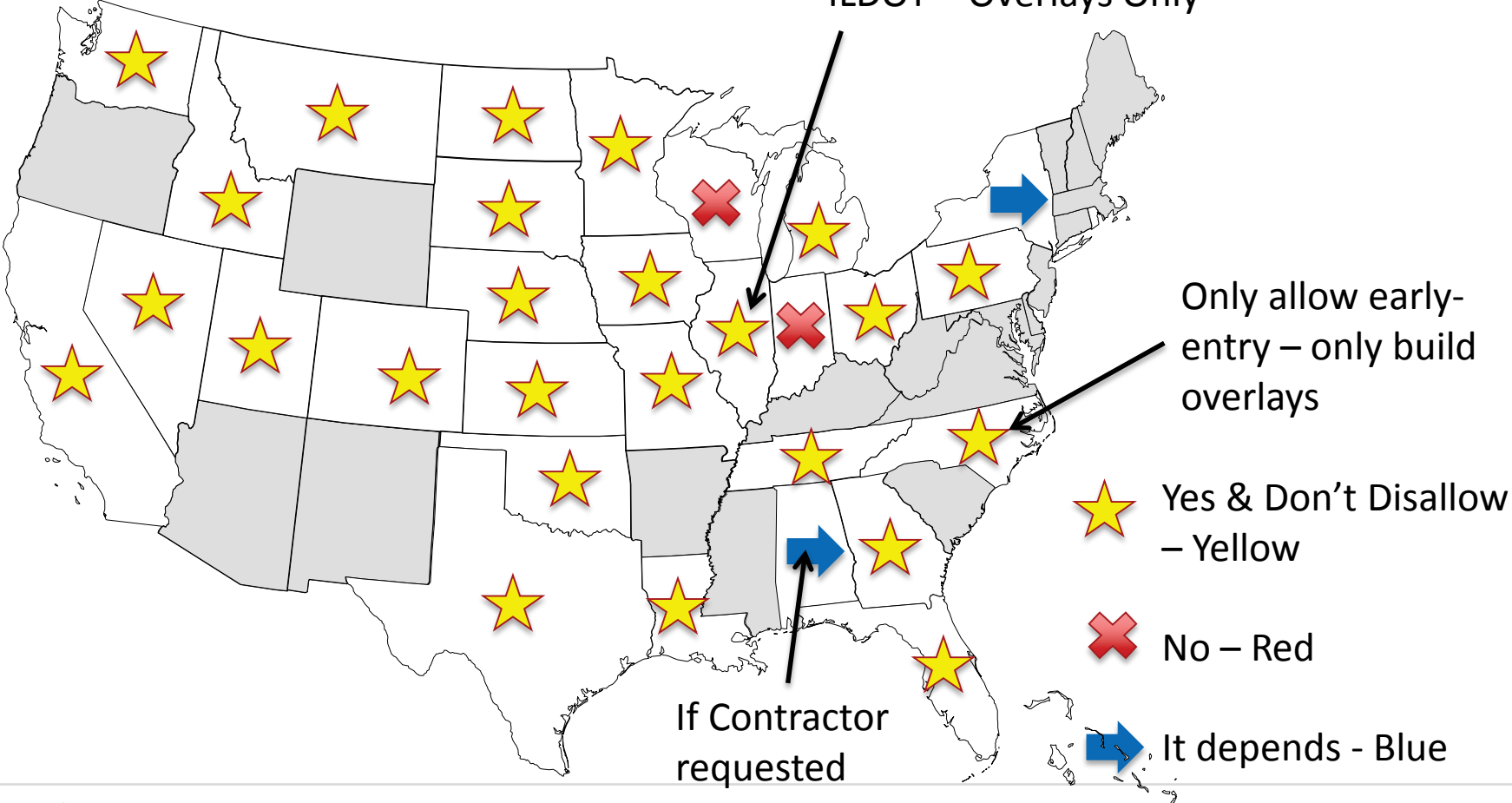
Q7: Do you routinely check sawcut depths? Q8: If yes, how often, with what, who?



Q9: Do you allow early entry sawing?

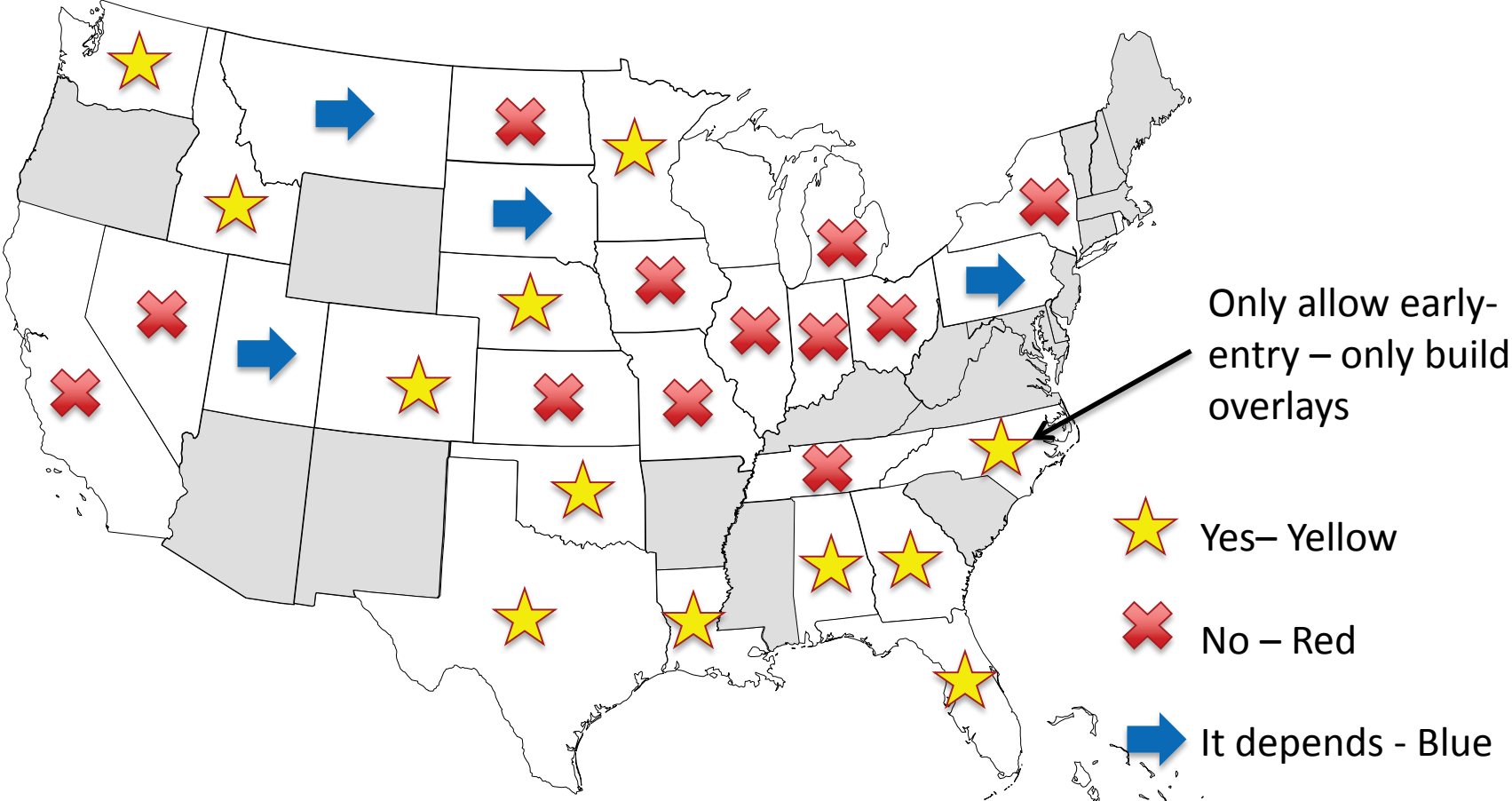
Answered: 30 Skipped: 1

Tollway – Only build on-grade
ILDOT – Overlays Only



Q10: When using early entry sawing, do you require additional sawing to achieve the minimum saw cut depth?

Answered: 28 Skipped: 3



Q10: When using early entry sawing, do you require additional sawing to achieve the minimum saw cut depth?

Answered: 28 Skipped: 3

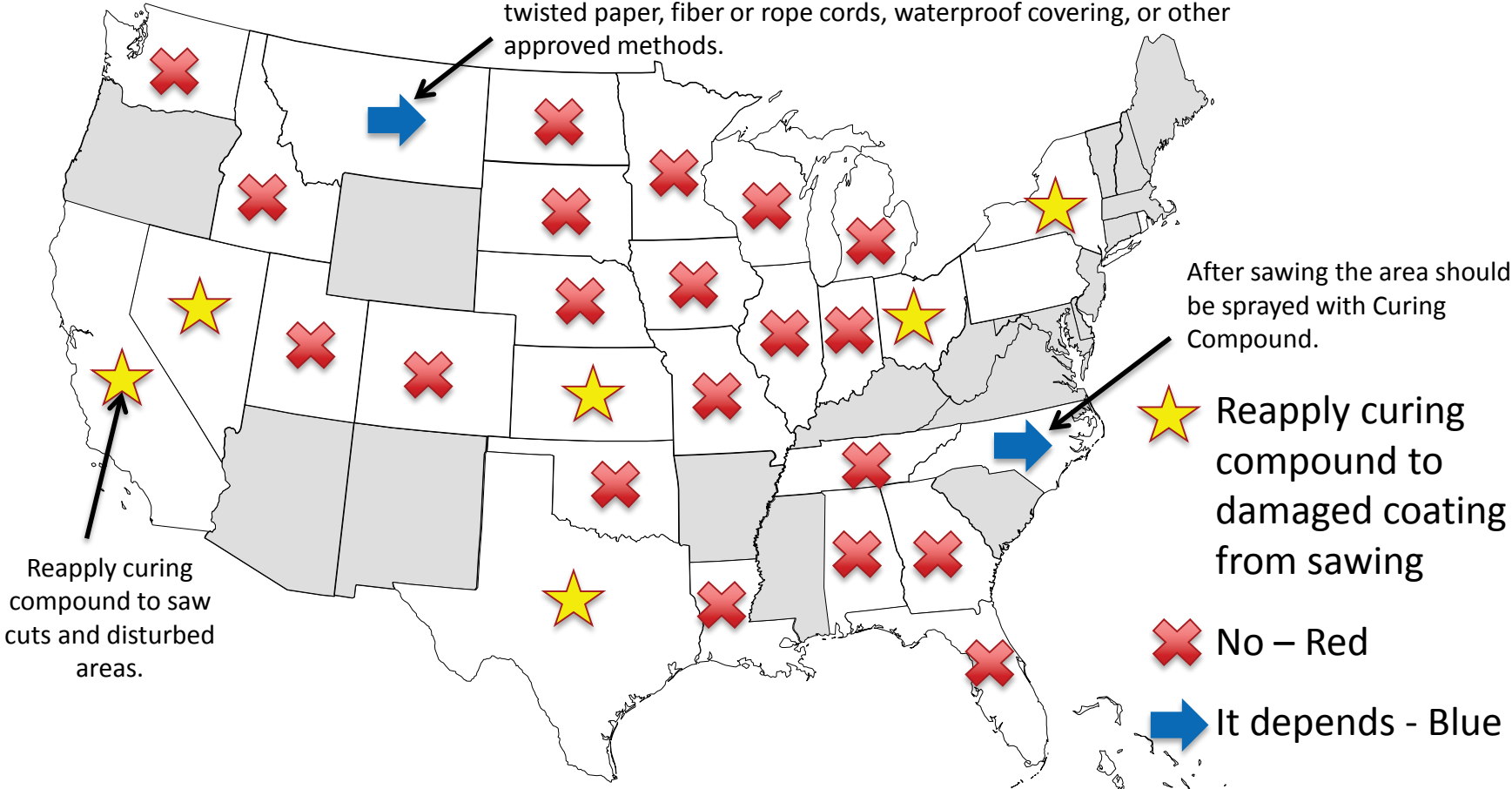
South Dakota - This is the language we use for Softcut sawing on Transverse joints:

- If an early entry saw is used, the cut may remain approximately 1 inch from the edges of the concrete slab to control spalling at the edge.
- Unless specified otherwise, the early entry saw cut shall be to a minimum depth of 1.0 inch.
- If an early entry saw is used, the Contractor shall complete the initial saw cut on all joints where a crack has not developed for the entire width and to the required depth before the end of the 72 hour curing period.
- The Engineer will not require the Contractor to complete the saw cut to the final required depth at joint locations where the early entry saw cut resulted in the concrete pavement cracking, as determined by the Engineer.
- The early entry saw shall not induce micro cracking along the saw cut.
- The Contractor shall repair damaged areas resulting from incorrect early entry sawing practices.

Q11: Do you require anything to continue curing the sawcut after sawing?

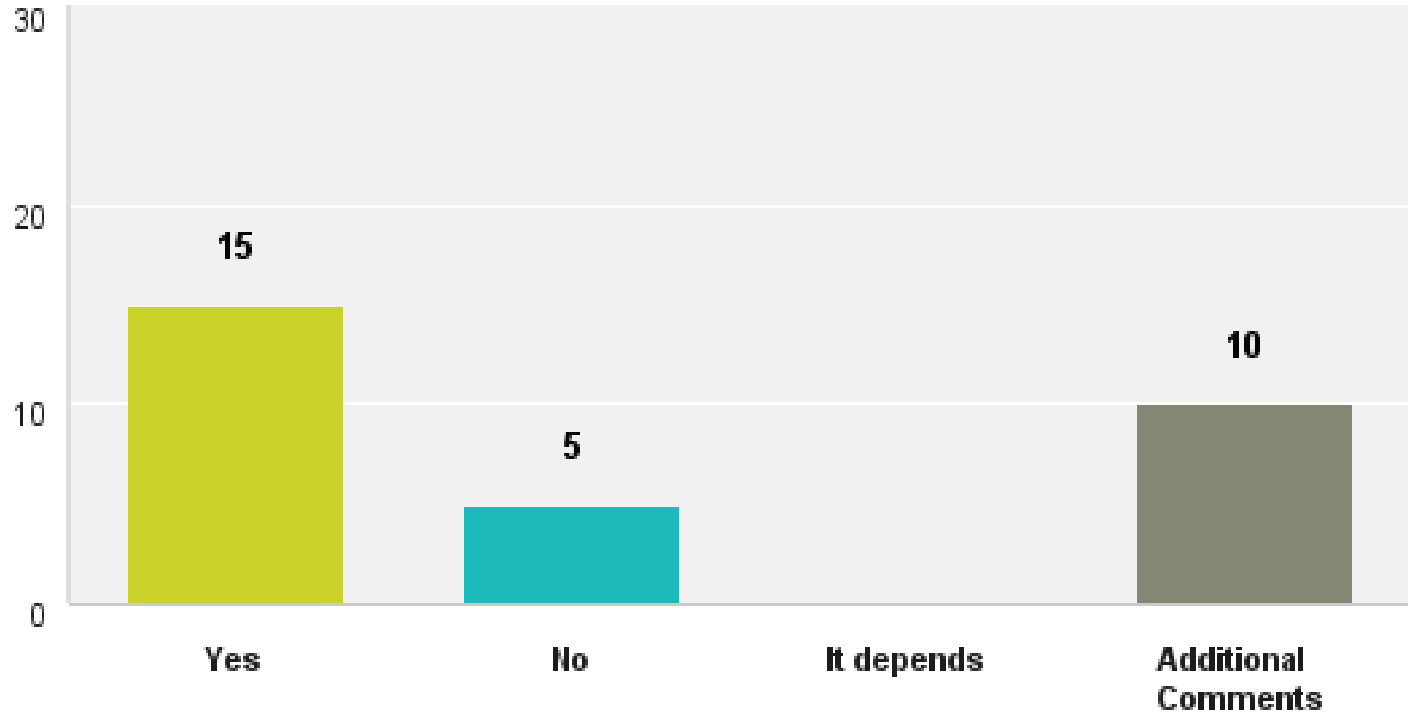
Answered: 29 Skipped: 2

Protect saw cuts in concrete 60 hours old or less from rapid drying using twisted paper, fiber or rope cords, waterproof covering, or other approved methods.



Q13: Do you require the Contractor to clean the joint out after sawing (regardless of sealing or not)?

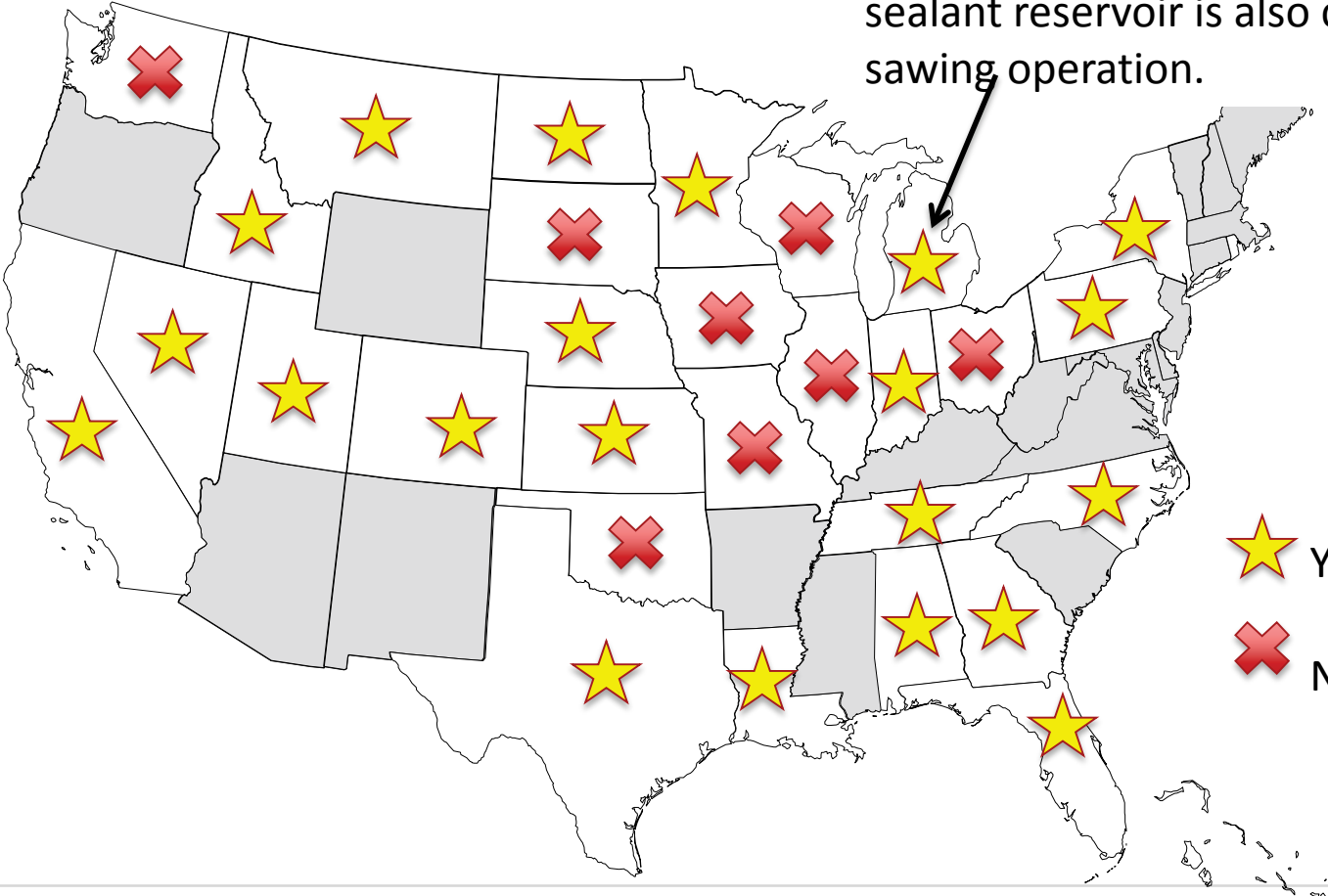
Answered: 30 Skipped: 1



Q13: Do you require the Contractor to clean the joint out after sawing (regardless of sealing or not)?

Answered: 30 Skipped: 1

Immediate cleaning is required if the sealant reservoir is also cut during initial sawing operation.

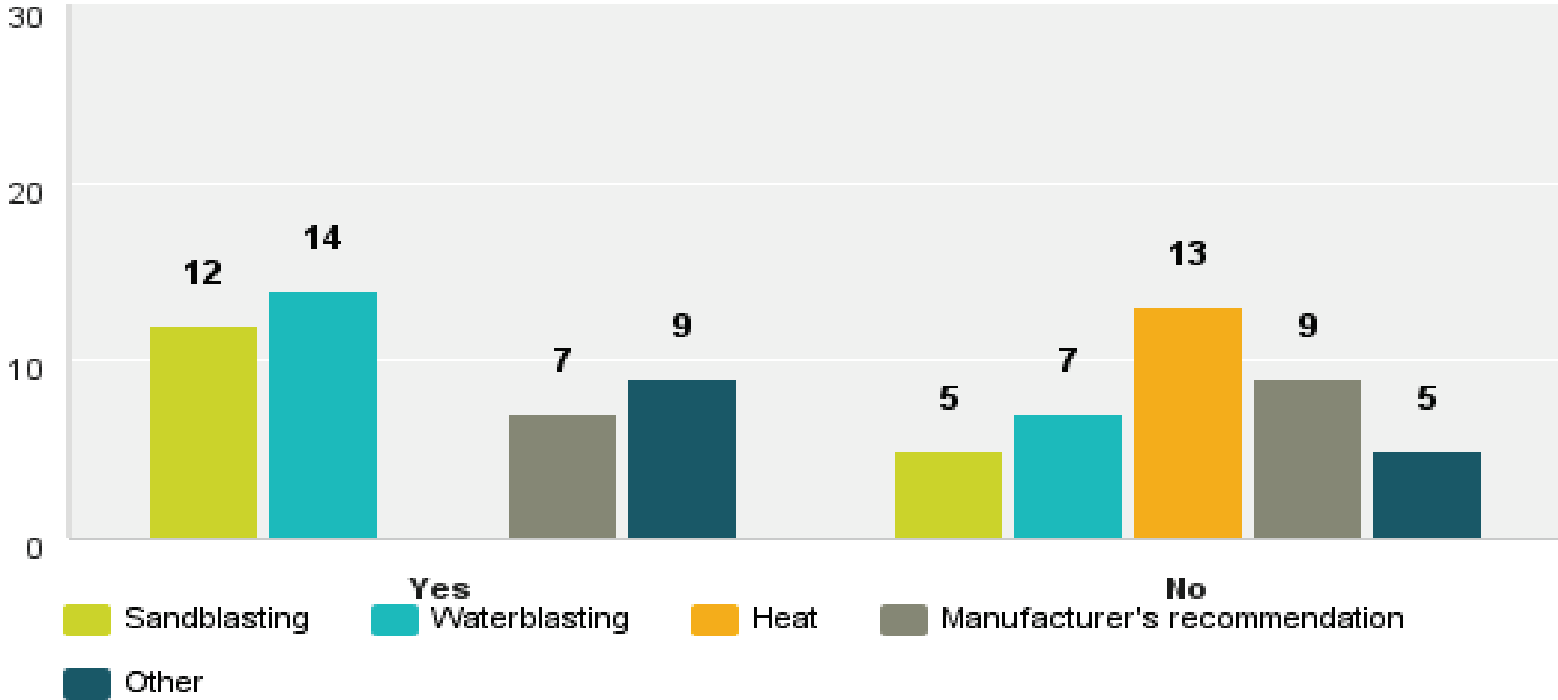


★ Yes – Yellow
✘ No – Red

Q14: What do you require for cleaning the joint prior to sealing?

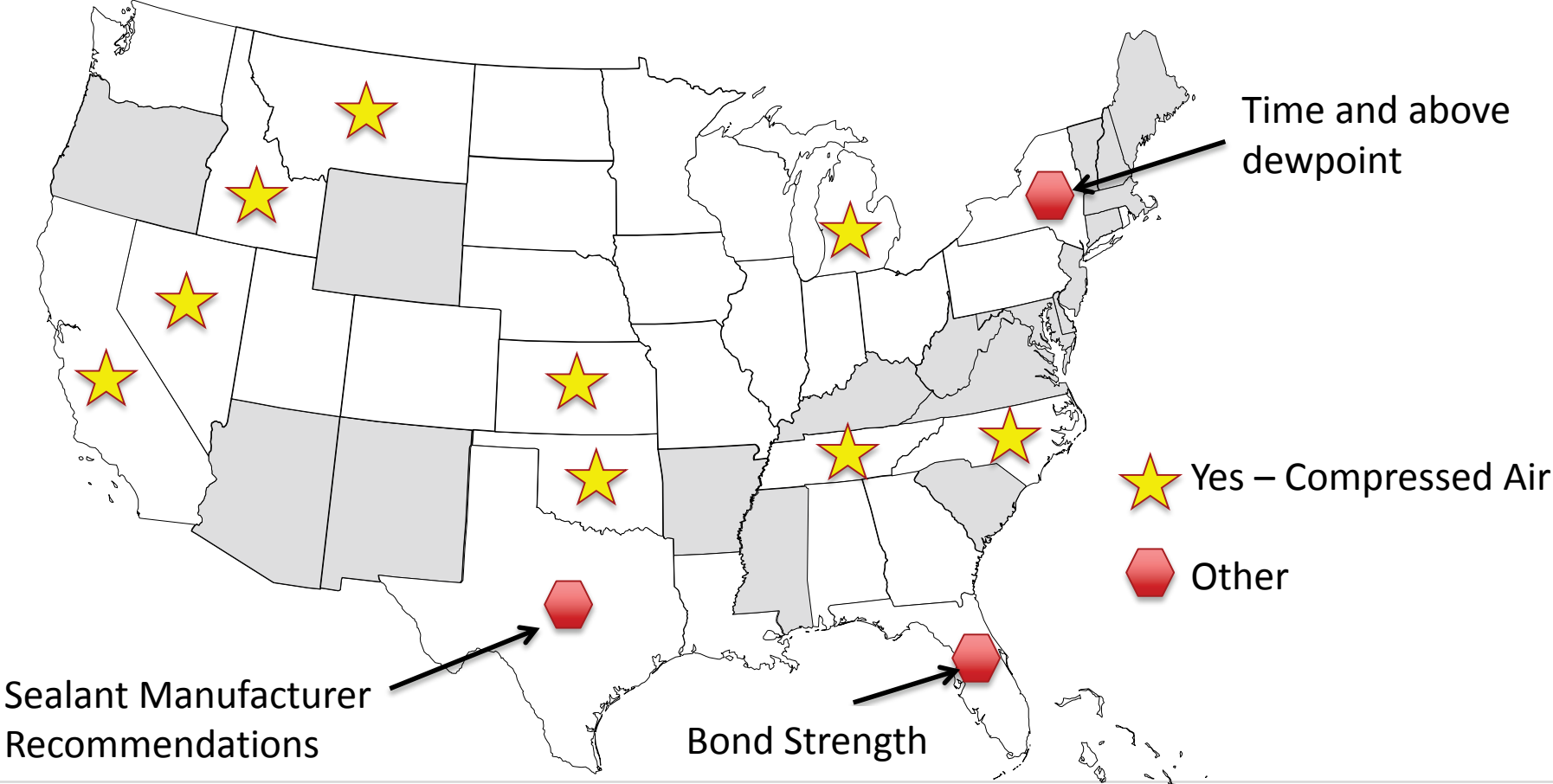
Answered: 28 Skipped: 3

Refer to the NC2 website for each DOT's response.



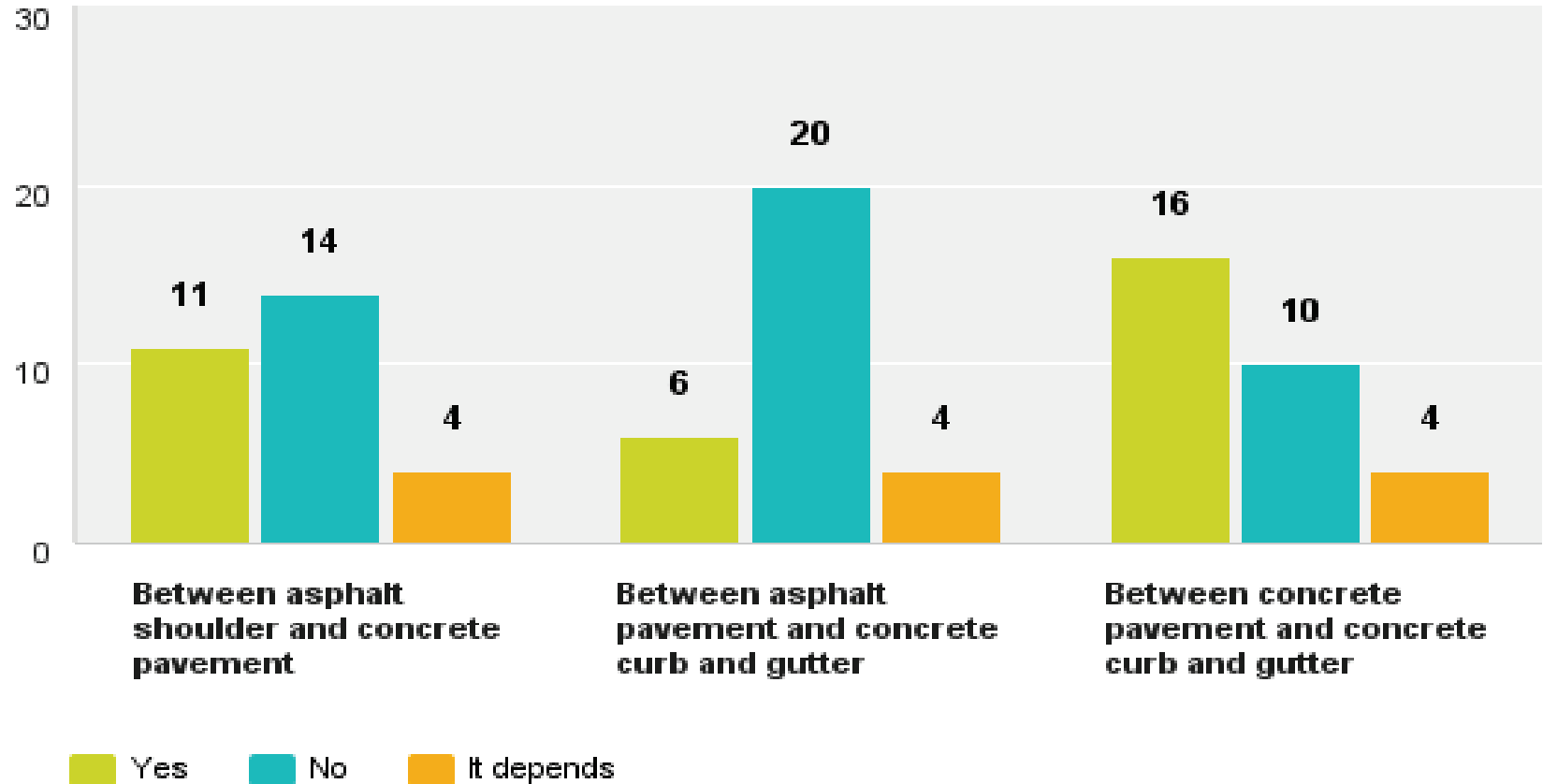
Q15: Do you require the Contractor to use a specific method for drying out the joints prior to sealing?

Answered: 30 Skipped: 1



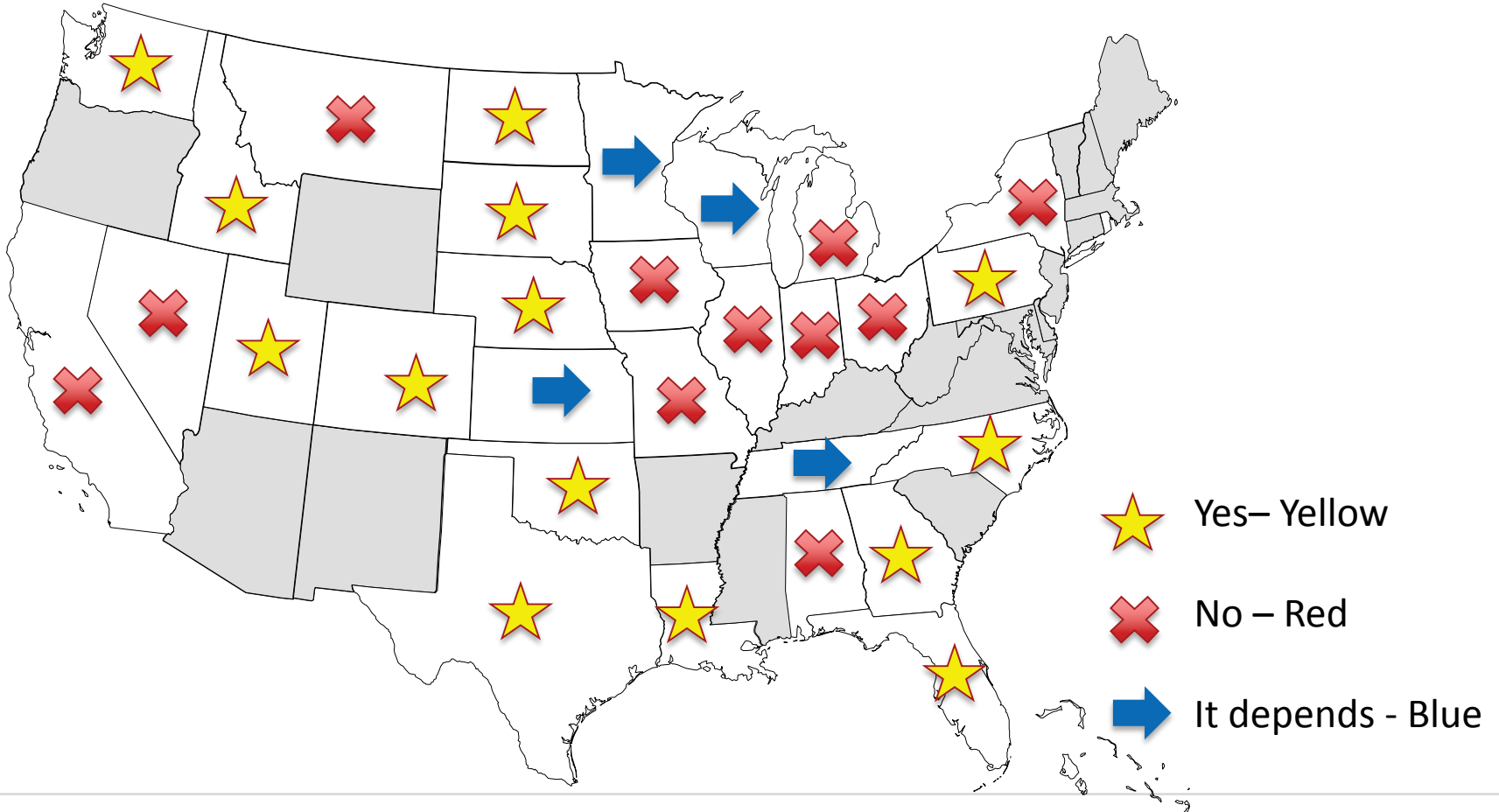
Q16: Do you seal the following longitudinal joints?

Answered: 30 Skipped: 1



Q16: Do you seal the following longitudinal joints? Between Asphalt Shoulder and Concrete Pavement

Answered: 30 Skipped: 1



Q16: Do you seal the following longitudinal joints? Between Asphalt Shoulder and Concrete Pavement

Answered: 30 Skipped: 1

Alabama - 410.03(h)1 says, in part, "The contact surface of concrete structures shall be treated with a thin coat of liquid asphalt binder material, tack material, or the liquid asphalt binder material used in the mix, prior to construction of the joint."

Colorado - We don't use asphalt shoulders for PCCP.

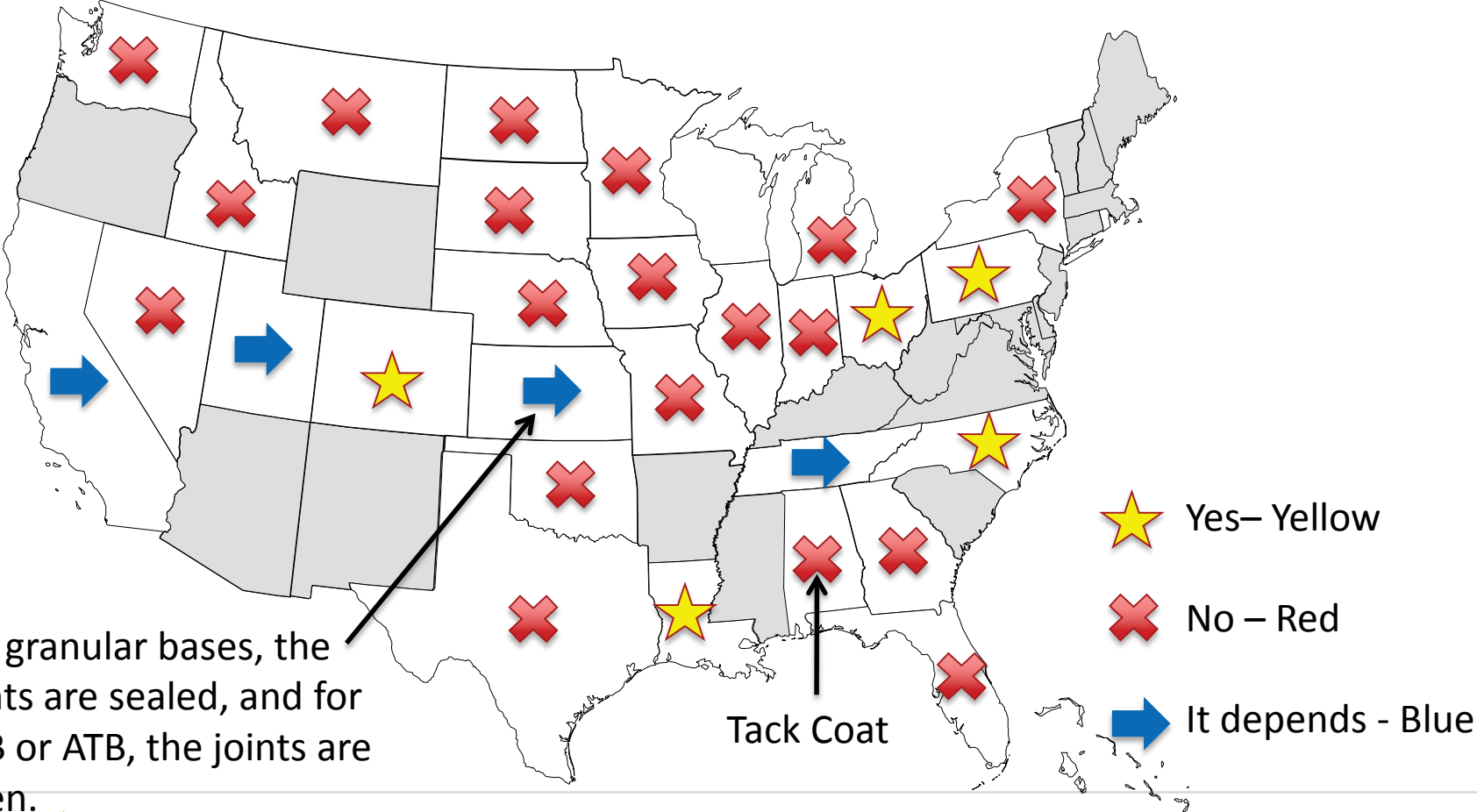
Kansas - Depends on the base. For granular bases, the joints are sealed, and for CTB or ATB, the joints are open.

Minnesota - Some Districts come back and seal the asphalt shoulder/concrete pavement joint 2-3 years after pavement construction. Sometimes with maintenance staff and sometimes by contract.

New York - No is for new construction. We have sealed the above after some time.

Q16: Do you seal the following longitudinal joints? Between Asphalt Pavement and Concrete Curb and Gutter

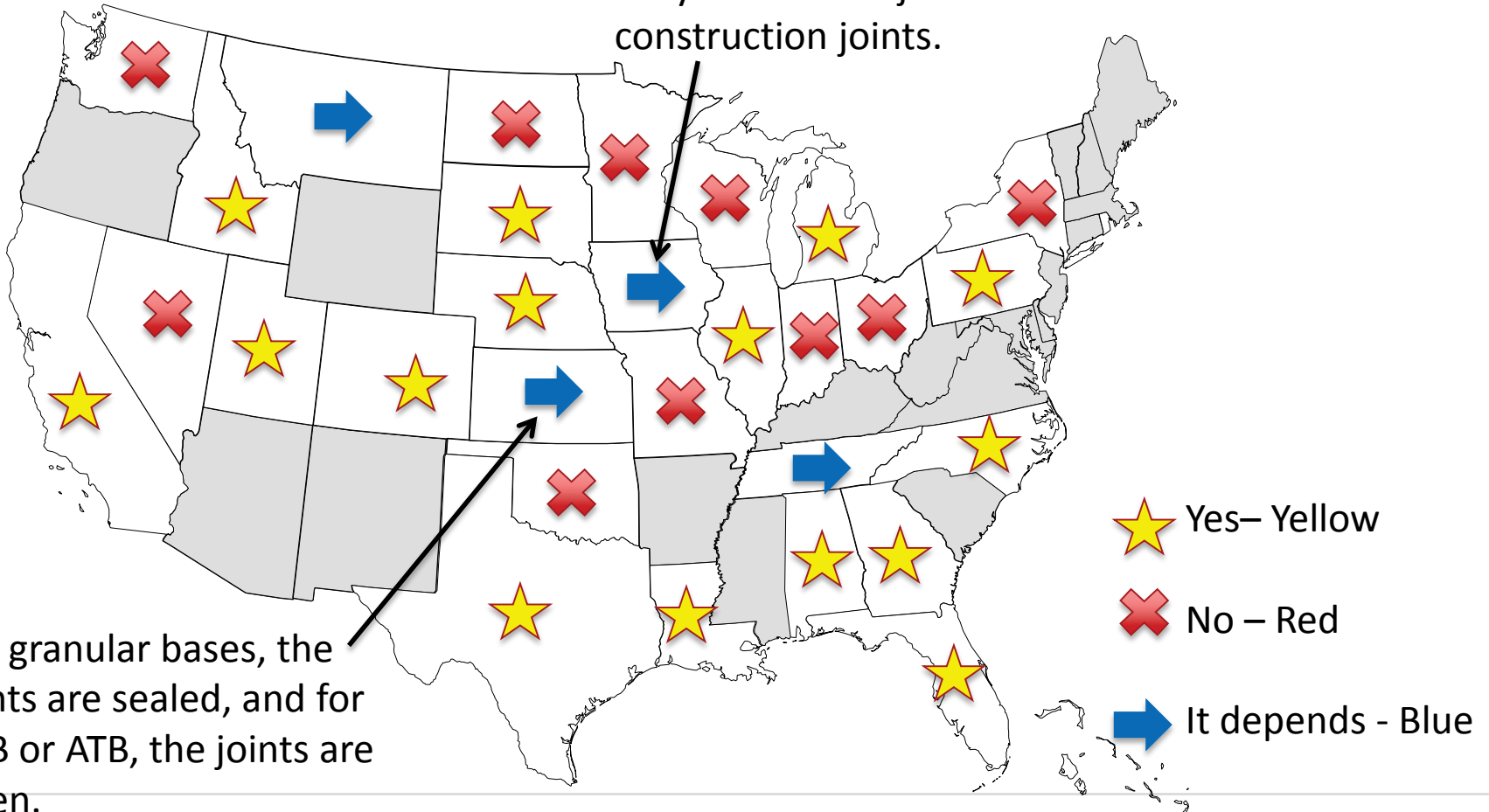
Answered: 30 Skipped: 1



Q16: Do you seal the following longitudinal joints? Between Concrete Pavement and Concrete Curb and Gutter

Answered: 30 Skipped: 1

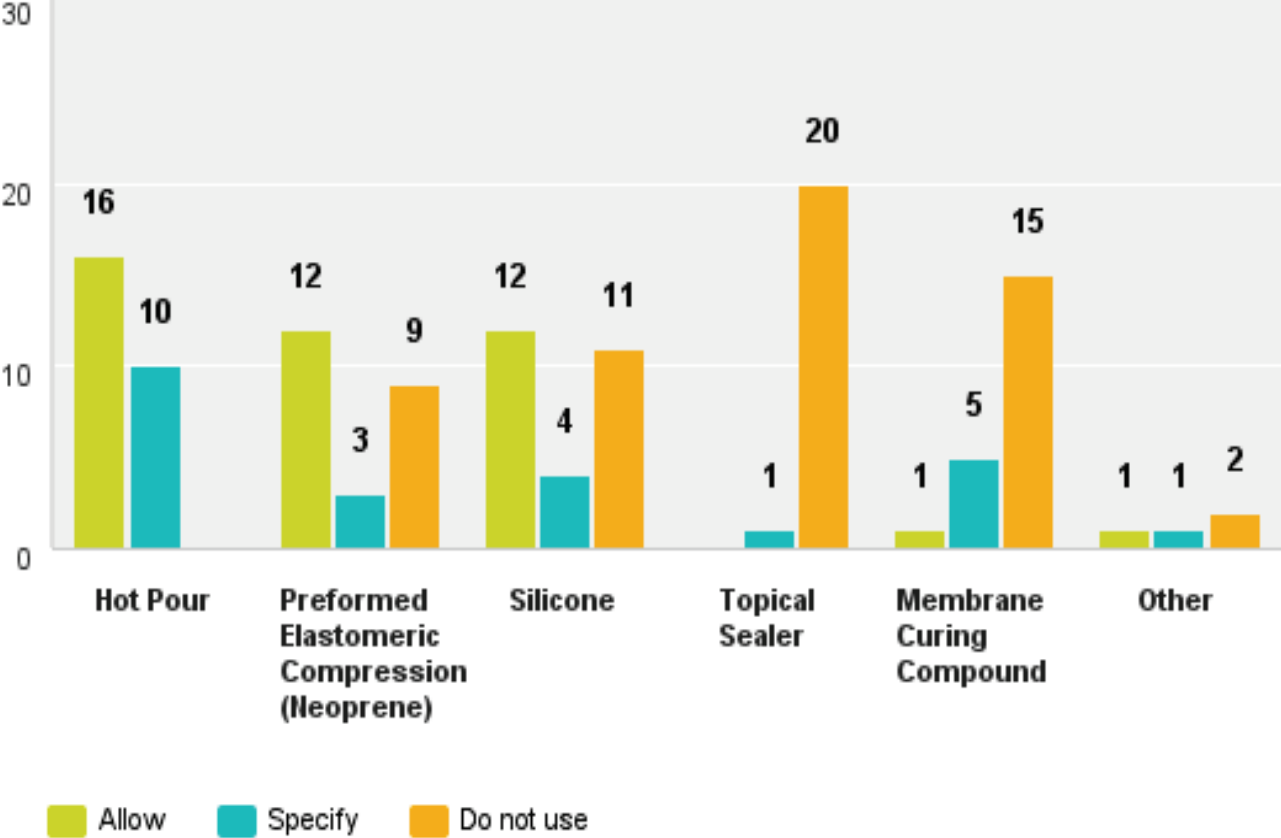
Only seal sawed joints. Do not seal construction joints.



For granular bases, the joints are sealed, and for CTB or ATB, the joints are open.

Q17: What type of joint sealants/sealers do you allow/specify?

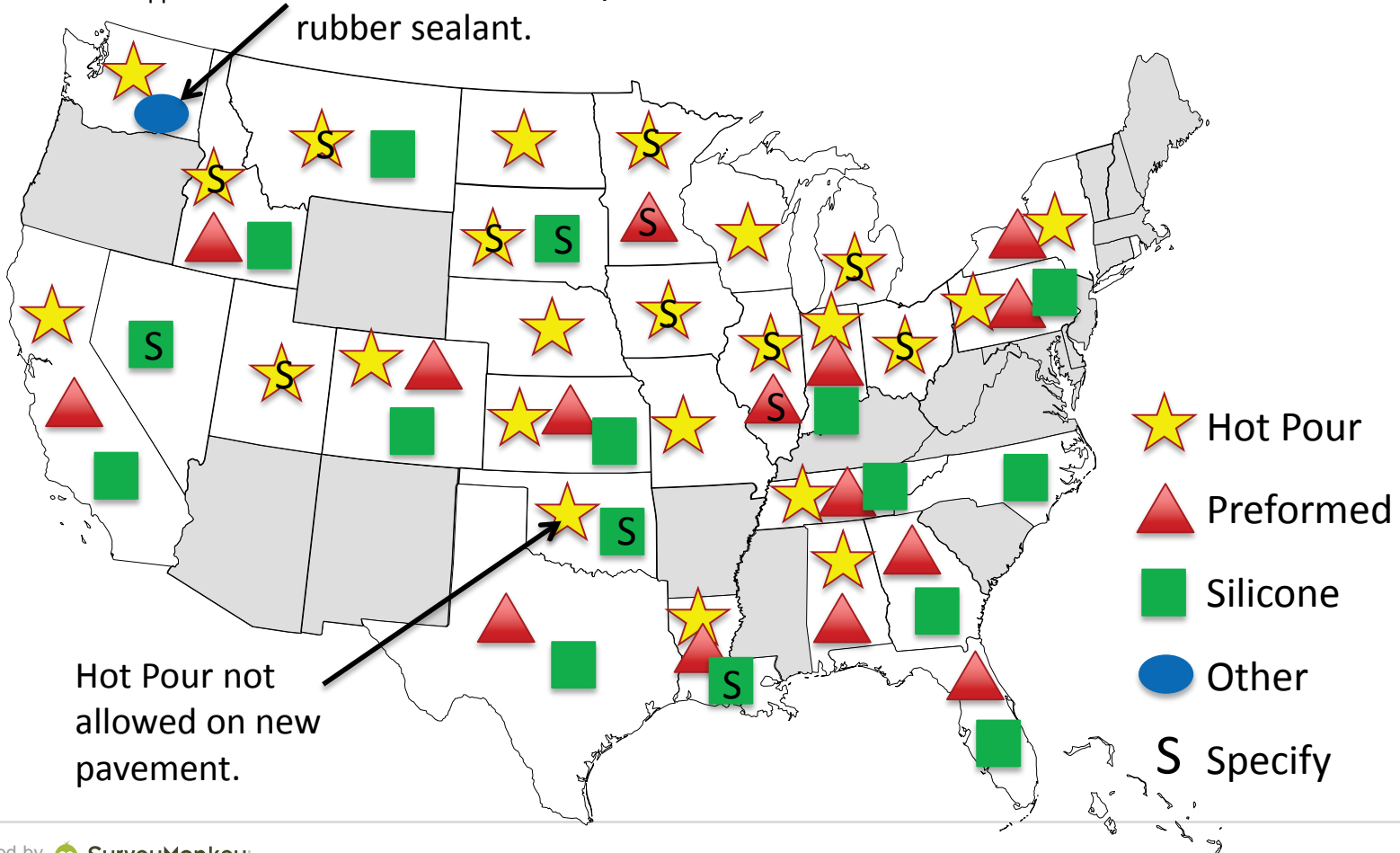
Answered: 30 Skipped: 1



Q17: What type of joint sealants/sealers do you allow/specify?

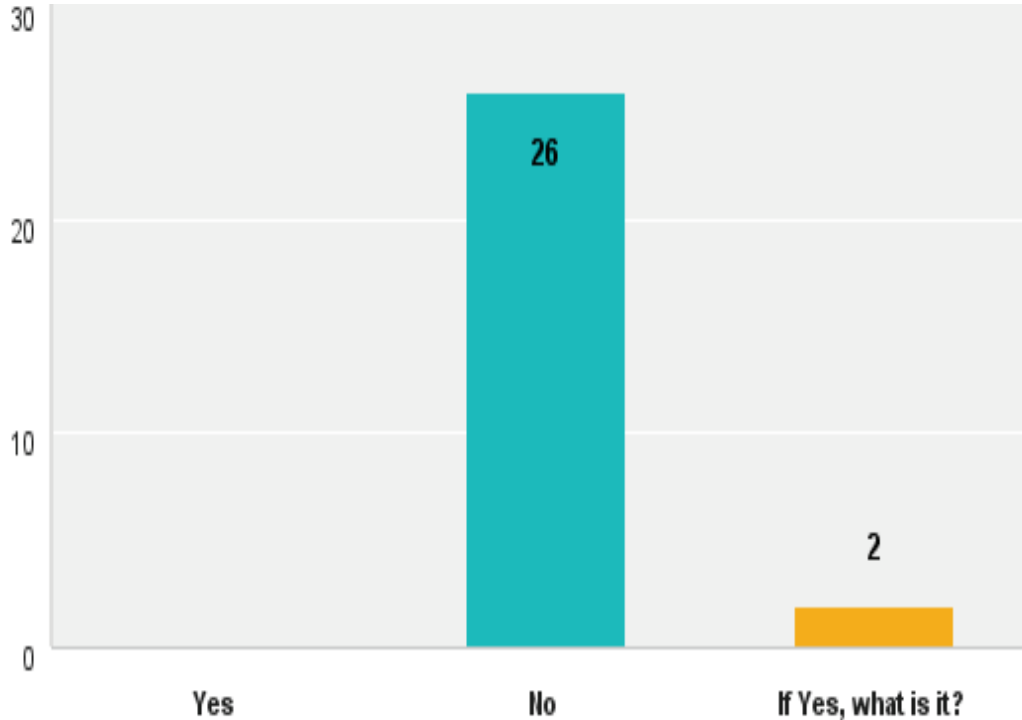
Answered: 30 Skipped: 1

WSDOT also allows poured rubber sealant.



Q18: Do you have a warranty for joint sealant performance?

Answered: 28 Skipped: 3



Michigan - Yes. 5-year
Materials and
Workmanship
Warranty

Florida -
Based on the
manufacturer's (joint
sealant) warrantee.

Q19: What is the typical performance life of a sealed joint?

Answered: 27 Skipped: 4

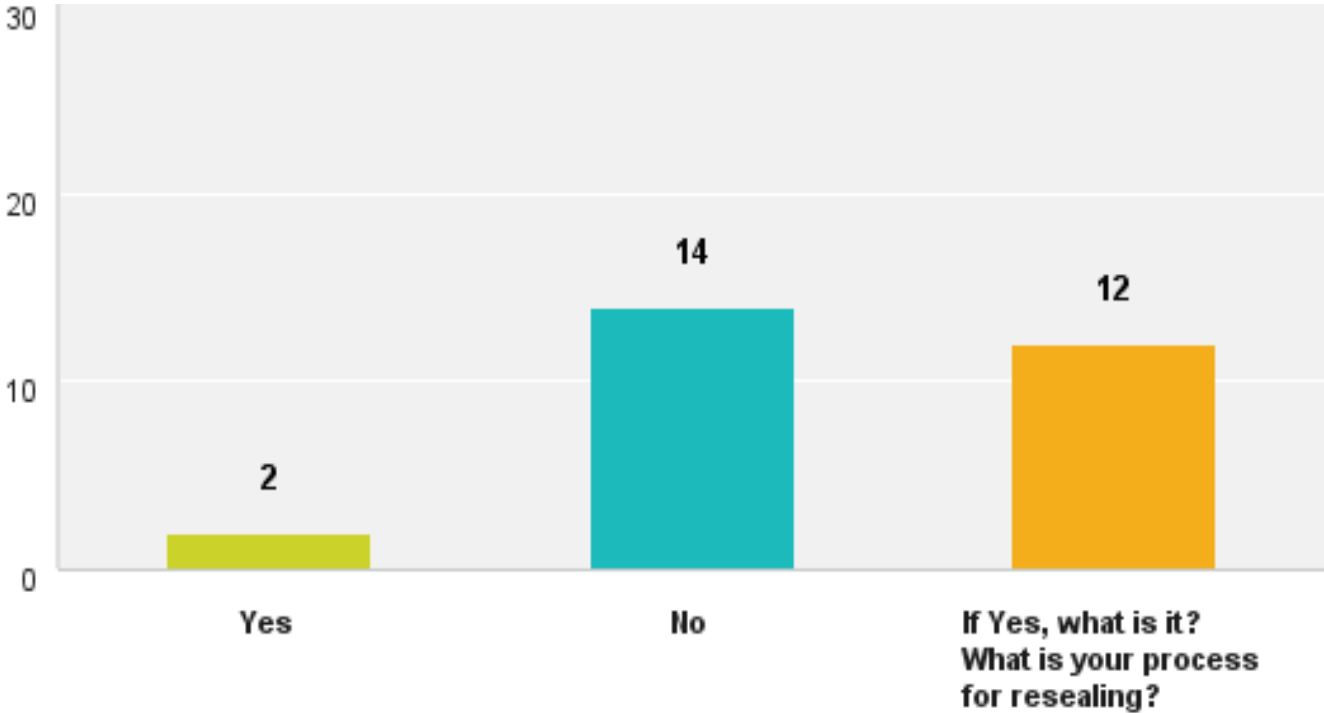
1-10	11-19	20+	Unsealed	It Depends	Unknown, N/A, or Not tracked
Minnesota Pennsylvania California Nevada Nebraska Colorado Texas Florida	Michigan Utah South Dakota Idaho Missouri	Iowa Georgia Washington	Wisconsin Kansas Ohio North Dakota	Indiana Louisiana	Tennessee Oklahoma Illinois Montana Alabama

All States that seal would probably answer “It depends” to some extent or another.

This question didn’t specify sealer type - **Refer to the NC2 website for each DOT’s response.**

Q20: Do you have a joint resealing program?

Answered: 28 Skipped: 3



Q20: Do you have a joint resealing program?

Florida – Not that I am aware of. But a contract could be let to do this work.

Georgia - Yes

Indiana - From the INDOT Road Design Manual: Contraction and longitudinal joints should be inspected periodically and cleaned and resealed as required. For preventative maintenance, timely sealing of the joints minimize dirt and moisture from entering the joints. Rigid pavement, 8-10 years old should be inspected. If on inspection, 10% of the joints have loose, missing or depressed sealant, sawing and sealing of the joints should be considered. The joints should be sawed to remove old sealant and to reshape the joint-seal reservoir.

Q20: Do you have a joint resealing program?

Louisiana - According to our policies and procedures, we generally do a joint sealing rehabilitation at 15-20 years. According to others in the Department, we don't do joint maintenance.

Michigan - Resealing joints in PCC pavements is part of the Capital Preventive Maintenance (CPM) Program. Each roadway is scoped and then programmed for CPM, as needed. Joint reservoir is resawed to establish new vertical surfaces, cleaned and then resealed using hot poured rubber sealant.

Minnesota - Not anymore. MnDOT did it over 20 years ago as a standard since money was typically set aside for that purpose. Pavement Management Data indicates better pavement performance in joint resealing sections. This was only good until the joints got wider than 1/2" then it seems the sealant was less effective.

Q20: Do you have a joint resealing program?

Nevada – Saw and reseal when rehabilitation is done, at approximately 10 to 15 years.

New York - I wouldn't call it a program. I go look, if it's open, I suggest that a region spend some of it's maintenance dollars on a re-seal. We're getting really good life on the ASTM D6690 Type IV. We haven't resealed one yet, but the first ones are in need. I would say that we get 10 good years with the Type IV. Our last neoprene contract was 1994. Joint seals are in very-good to excellent condition today.

North Carolina - Per recent state legislation joints have become a pavement preservation tool, before that time our maintenance forces handled joint sealing, if needed.

Q20: Do you have a joint resealing program?

South Dakota - We usually only do re-sealing at 15 - 20 years old with a joint and spall repair project.

Tennessee - Preventive Maintenance Program which addresses all types of joints and sealants. If sealant does not bond to concrete, remove, clean, and reseal.

Utah - Generally, we evaluate and reseal joints as necessary in conjunction with any other pavement preservation or rehabilitation work on PCCP. We don't generally have joint resealing as a driver of those projects.

Questions 12, 21-22

Q12: What is the sequence between initial joint sawing and final sawing?

Q21: Please attach a link to approved products list and approval process for joint sealants.

Q22: Please attach a link to your current standard joint details.

Refer to the NC2 website for each DOT's response.

Q23: Any additional comments?

Illinois Tollway - Follows IDOT specifications for sawing and sealing joints

Indiana - INDOT is not really happy with our current sealing specification and we are currently in the process of reviewing it and revising it.

Minnesota - How do states deal with raveled joints?

New York - Since 2001, we have been doing T/3 transverse cuts 0.125 inch wide. Then, after 3 days, we widen it to 0.25 inch for a 1" depth. We fill the whole thing up with ASTM D6690 Type IV. We try to leave it a touch low so it doesn't smush up too badly. The 0.25 inch widening is so the stuff goes in the joint. It won't go in at 0.125 inch. **I'd like to see some improvement in the nozzle technology.**

Pennsylvania - Interested in recommendations.