



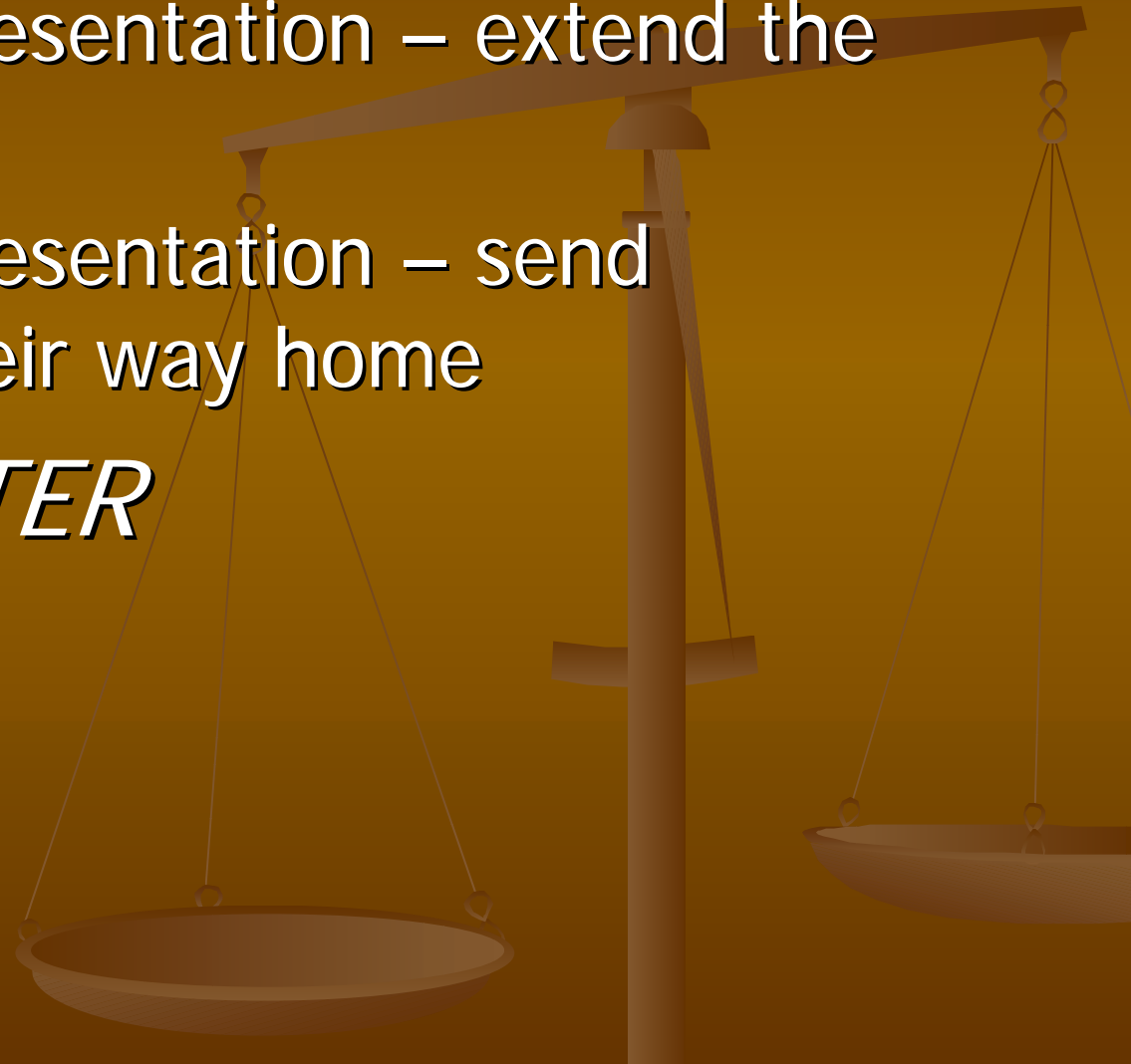
Northeastern Applications of Modified Binders

5th Annual Meeting of AMAP
Nashville, TN

Larry Ostermeyer – McConnaughay
Technologies

Final Presentation, Final Day

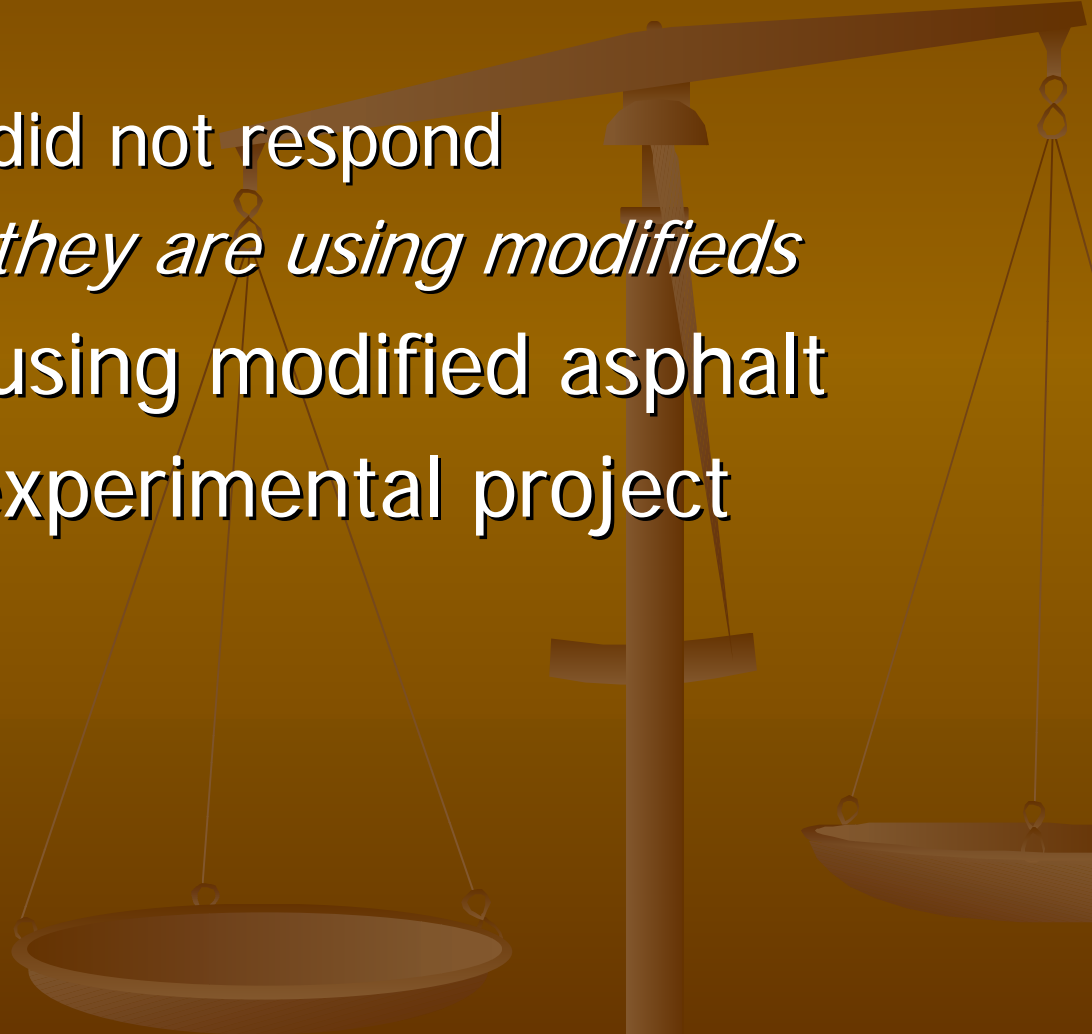
- Very lengthy presentation – extend the meeting
- Or very brief presentation – send everyone on their way home
- ***CHOOSE EITHER***



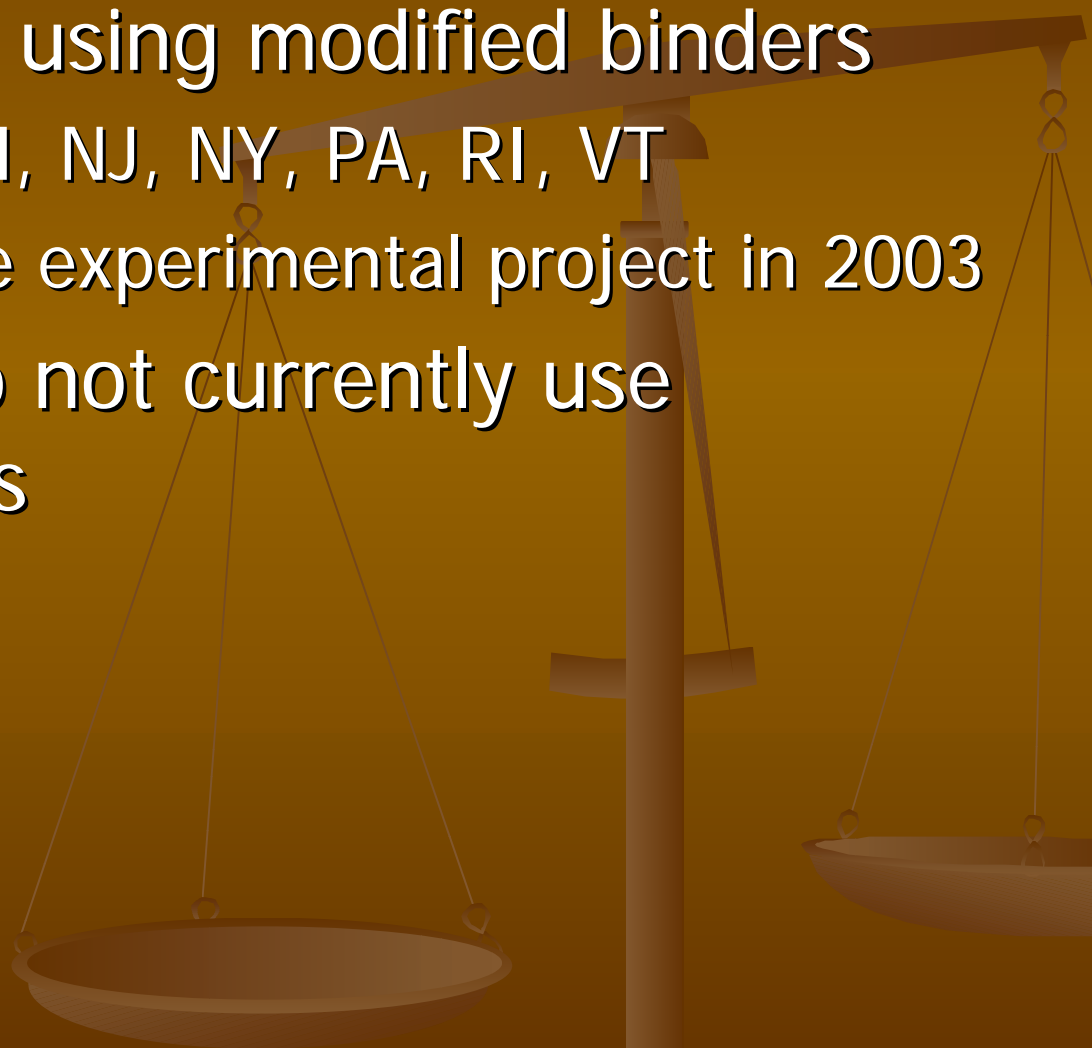
Northeast States Survey

- Maine
 - New Hampshire
 - Vermont
 - Massachusetts
 - Connecticut
 - Rhode island
 - New York
 - Pennsylvania
 - Maryland
 - New Jersey
 - Delaware
 - District of Columbia
- 

Northeast States Survey

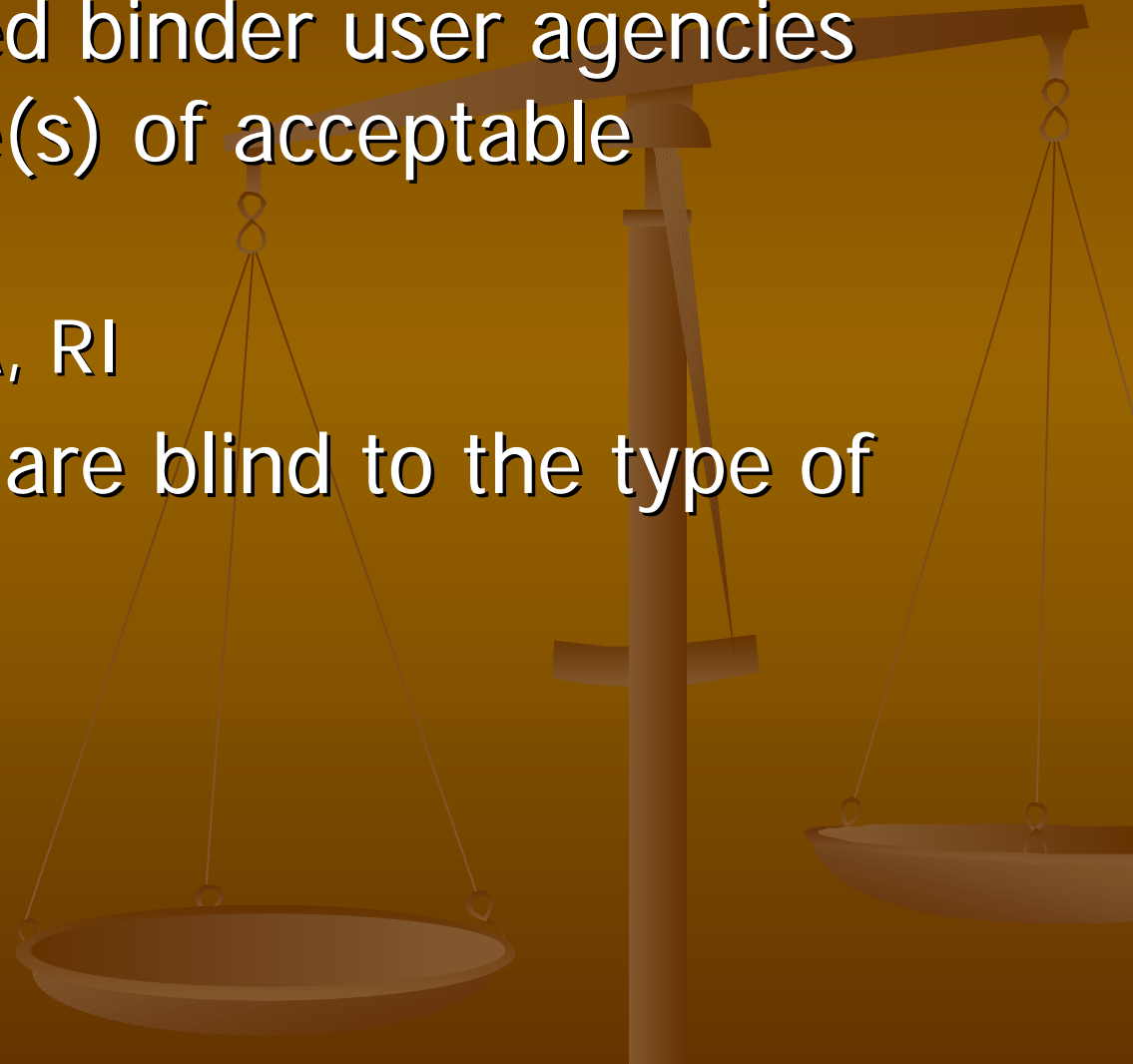
- 11 Responses
 - Massachusetts did not respond
 - *Do not believe they are using modifieds*
 - 9 are currently using modified asphalt
 - 1 has used on experimental project
 - 1 is not using
- 

Northeast States Survey

- States currently using modified binders
 - CT, DE, MD, NH, NJ, NY, PA, RI, VT
 - ME used on one experimental project in 2003
 - DC (and MA) do not currently use modified binders
- 

Northeast States Survey

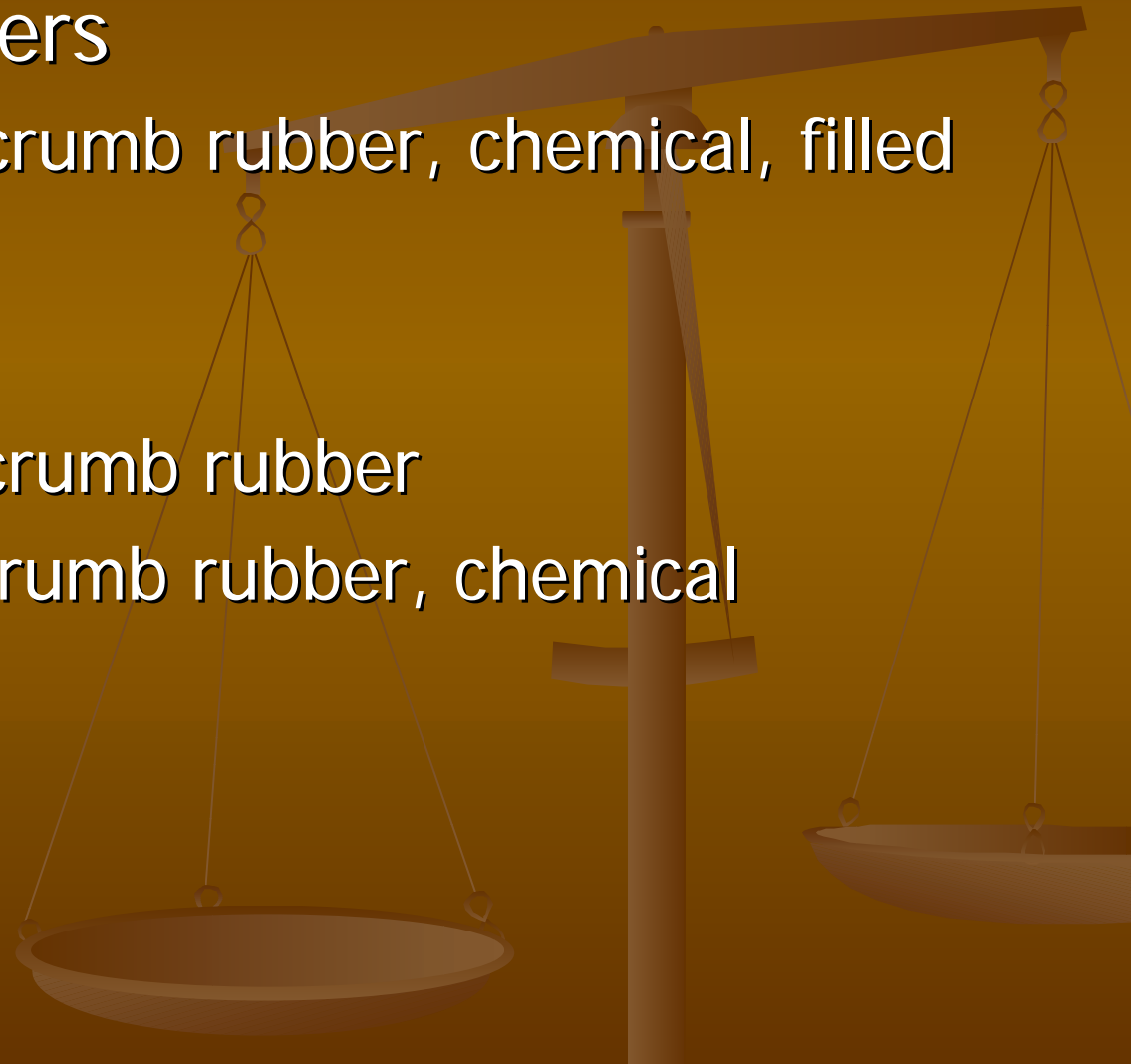
- 5 of the modified binder user agencies specify the type(s) of acceptable modification
 - CT, DE, MD, PA, RI
- NH, NJ, NY, VT are blind to the type of modifier



Northeast States Survey

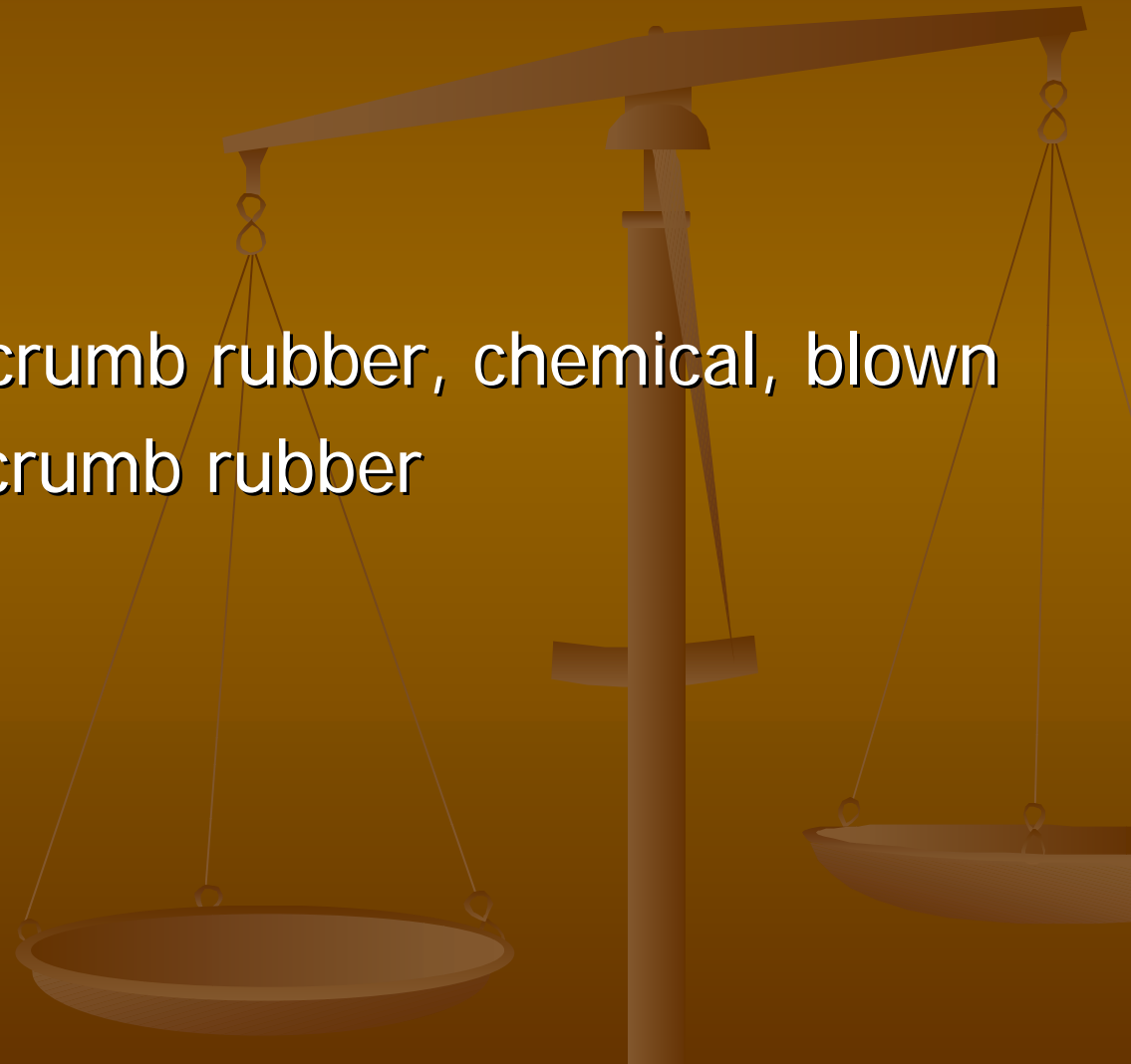
■ Specified Modifiers

- CT – polymer, crumb rubber, chemical, filled
- DE – polymer
- MD – polymer
- PA – polymer, crumb rubber
- RI – polymer, crumb rubber, chemical



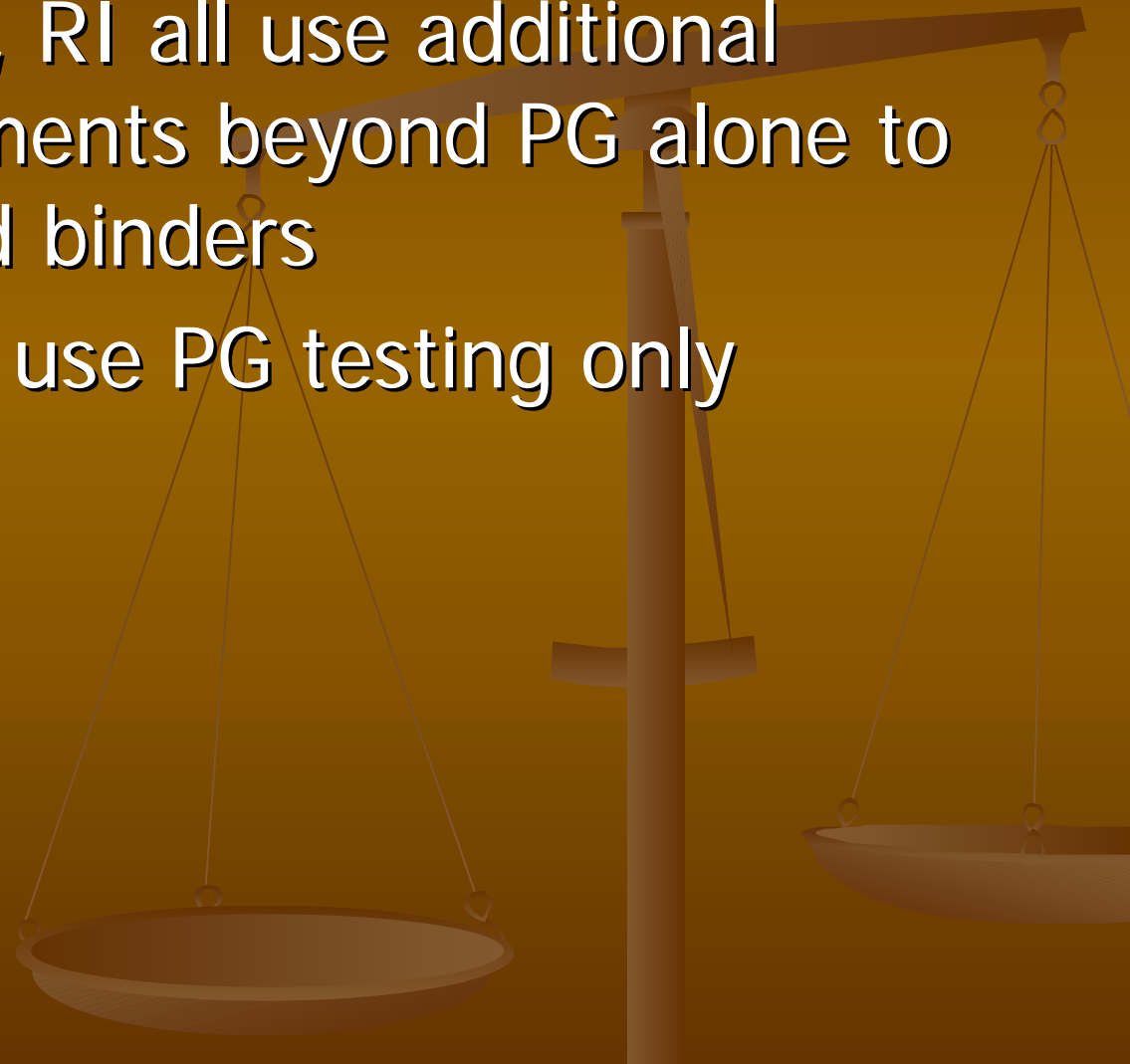
Northeast States Survey

- Used Modifiers
 - NH – polymer
 - NJ – polymer
 - NY – polymer, crumb rubber, chemical, blown
 - VT – polymer, crumb rubber



Northeast States Survey

- CT, NH, NY, PA, RI all use additional testing/requirements beyond PG alone to specify modified binders
- DE, MD, NJ, VT use PG testing only



Modified Binder Uses

USE	CT	DE	MD	NH	NJ	NY	PA	RI	VT
HMA – conventional	X			X			X		X
HMA- Superpave	X	X	X	X	X	X	X		X
Emulsion Chip Seals	X				X	X	X		
Hot Applied Chip Seals	X							X	
Dense Graded Cold Paving Mixtures	X						X		
Open Graded Cold Paving Mixtures							X		
Cold Recycled Mixtures	X						X		
Cold patch Mixtures	X					X	X		
Crackfillers	X			X		X	X	X	
Other			X					X	

Questions ?????

